



Administrative County of Middlesex.

ANNUAL REPORT

OF THE

COUNTY MEDICAL OFFICER OF HEALTH

FOR THE

YEAR 1937.

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Printers to His Majesty The King.

1939.

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TO THE CHAIRMAN, ALDERMEN AND MEMBERS
OF THE COUNTY COUNCIL OF MIDDLESEX.

SIR, MY LORD, LADIES AND GENTLEMEN,

I have the honour to present my report upon the health of Middlesex, and upon the Public Health activities of the County Council during the year 1937.

The delay in the submission of this report, which is much regretted, has been caused by the greatly increased pressure of work to which my Department has been subjected during the year 1938. The County Council's progressive policy in the development of its Public Health services has naturally added to the duties of my central administrative medical staff and myself, whilst, over and above what may be termed this natural increase, have been added heavy additional responsibilities in connection with the medical aspects of the Government's scheme of Air Raid Precautions. The pressure arising from the latter cause reached its climax in the Crisis of September, 1938, and has continued without much remission up to the present time.

The vital statistics for the County of Middlesex for the year 1937 reveal on the whole a very satisfactory state of affairs. For the fourth year in succession the birth-rate shows a slight rise, the maternal mortality-rate and infantile mortality-rate are sustained at satisfactorily low levels, and the death-rate from tuberculosis for 1937 is the lowest on record. Consideration of these figures, however, should not be permitted to induce any state of complacency, for, although satisfactory as judged by present standards, they are evidence that there still is much disease and disability awaiting the advance of preventive medicine.

Among notable events which occurred during 1937, and to which reference is made in the body of the report, was the opening of the new County Sanatorium, Harefield, in October, by H.R.H. the Duke of Gloucester.

May I take this opportunity of expressing my deep sense of gratitude and appreciation to the Chairmen and members of the Public Health and Maternity and Child Welfare Committees, for their unfailing support and consideration during a particularly strenuous year. I wish also to express my thanks to all members of the staff of the Public Health Department for the help they have given to me, and for their most loyal and willing service. Whilst I feel it almost invidious to single out any individual member, I would especially recognise the devoted work of my deputy, Dr. Macaulay.

I have the honour to be,

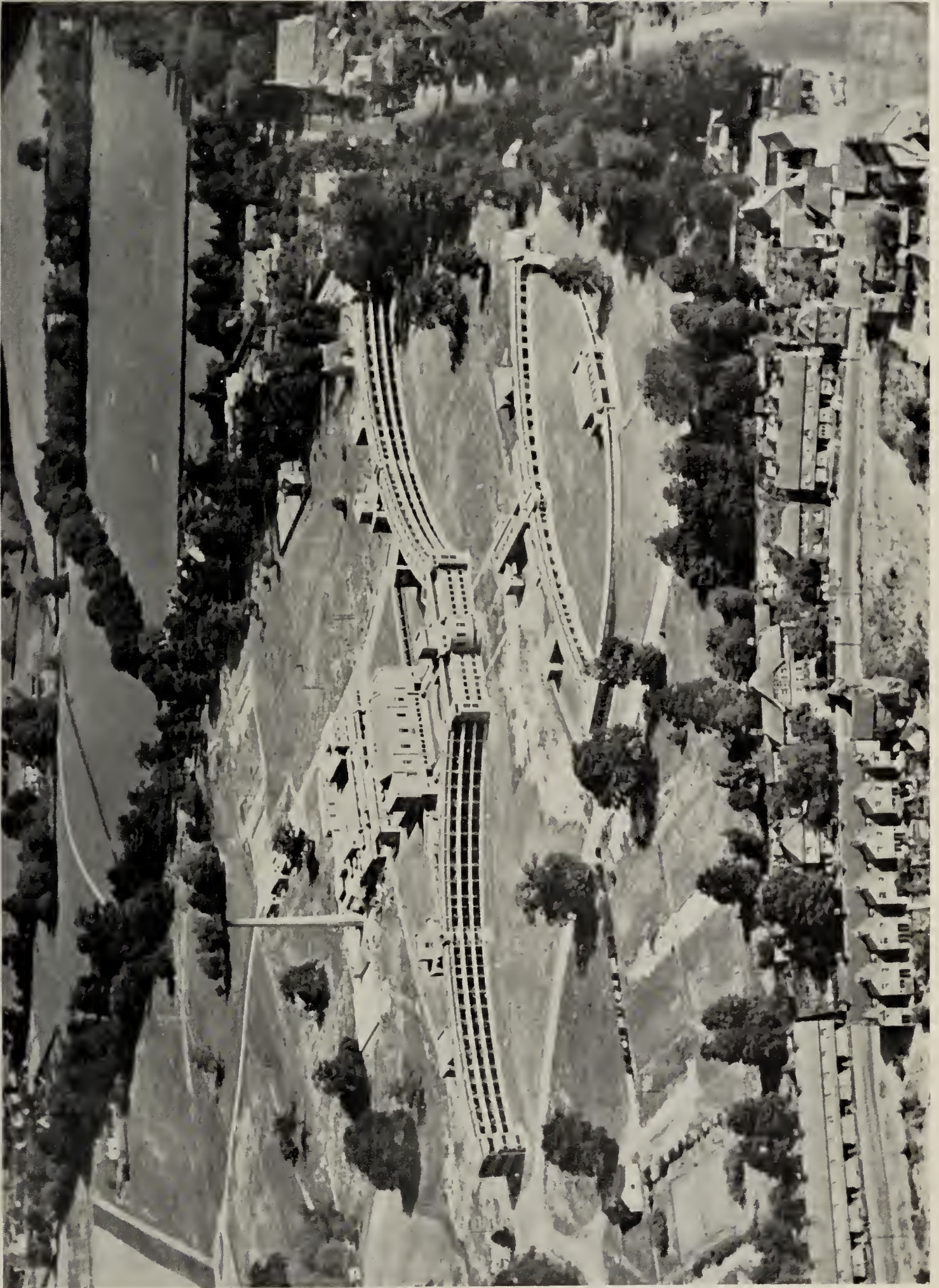
Your obedient Servant,



County Medical Officer.

PUBLIC HEALTH DEPARTMENT,
 10, GREAT GEORGE STREET,
 WESTMINSTER, S.W.1.

March, 1939.



HAREFIELD SANATORIUM FROM THE AIR.



Staff.

WHOLE-TIME OFFICERS.

County Medical Officer of Health and School Medical Officer :

J. Tate, M.R.C.S., L.R.C.P., D.P.H.

Deputy County Medical Officer of Health and Deputy School Medical Officer :

H. M. C. Macaulay, M.D., B.S., B.Sc., D.P.H.

Assistant County Medical Officers of Health :

A. C. T. Perkins, M.C., M.D., B.S., D.P.H.

Miss M. Back, M.D., B.S., D.P.H.

Tuberculosis Medical Officers :

O. Bruce, M.R.C.S., L.R.C.P.

W. S. Forbes, M.B., Ch.B., D.P.H.

S. Trevor Davies, M.R.C.S., L.R.C.P.

A. S. Hall, M.A., M.B., B.Ch., M.R.C.P.

J. R. B. Dobson, M.B., B.S., B.Sc.

J. T. N. Roe, M.D., Ch.B., D.P.H.

H. Evans, M.D., Ch.B., D.P.H.

*Assistant Medical Officers :**(Maternity and Child Welfare and School Medical Inspection and Treatment.)*

Mrs. A. M. Burn, M.B., Ch.B., D.P.H.

H. W. Moir, M.B., Ch.B., D.P.H.

Miss J. R. Campbell, M.B., Ch.B., D.P.H.

Lieut.-Col. H. L. W. Norrington, D.S.O.,
M.R.C.S., L.R.C.P. (Retired Aug., 1937).Miss K. M. Cellan-Jones, M.D., B.S., B.Hy.,
D.P.H. (Resigned Nov., 1937).Mrs. E. G. Porter, M.R.C.S., L.R.C.P., D.P.H.
(Appointed Aug., 1937).

J. B. Ewen, M.D., Ch.B., D.P.H.

Miss M. K. Ruddy, M.D., B.S., B.Sc.

Miss K. Glyn-Jones, M.R.C.S., L.R.C.P.

Mrs. R. H. Shelley, M.B., B.S.

W. R. H. Heddy, M.R.C.S., L.R.C.P., D.P.H.,
Barrister-at-Law.Miss E. S. Stephen, M.B., Ch.B., D.P.H.
(Appointed Sept., 1937).

R. A. Jones, M.B., Ch.B., B.Sc., D.P.H.

J. R. Tibbles, M.B., Ch.B., D.P.H.

Miss E. M. Malmberg, M.B., B.S., D.P.H.
(Appointed Dec., 1937).

Miss G. Wilson, M.A., M.B., Ch.B., D.P.H.

G. B. Matthews, M.R.C.S., L.R.C.P. (Appointed
July, 1937).

Miss C. I. Wright, M.D., B.S., D.P.H.

*Senior Dental Officer :**(Maternity and Child Welfare, County Sanatoria, School Dental Treatment.)*

S. J. Smith, L.D.S.

*Assistant Dental Officers :**(Maternity and Child Welfare and School Dental Treatment.)*

J. V. Bingay, L.D.S.

R. V. Kingham, L.D.S.

R. E. Cook, L.D.S.

S. A. McLaren, L.D.S.

Mrs. A. M. Ferry, L.D.S.

R. S. Matthew, L.D.S.

W. G. C. Hackman, L.D.S.

Mrs. I. M. Pritchard, L.D.S.

Miss C. M. Henderson, L.D.S.

E. Sharp, L.D.S.

F. Jones, L.D.S.

Mrs. F. M. Sievers, L.D.S.

*Supervisors of Midwives :*Miss M. Back, M.D., B.S., D.P.H. (*see above*).

Miss C. A. M. Coleman, S.R.N., S.C.M.

<i>Tuberculosis Dispensary Nurses</i>	..	..	..	..	..	..	..	15
<i>Health Visitors and School Nurses</i>	..	..	..	..	..	..	..	36
<i>Dental Nurses and Dental Attendants</i>	..	..	..	..	..	..	..	14
<i>Midwives</i>	..	..	..	..	..	..	..	23

*Veterinary Inspector :**(Milk and Dairies (Consolidation) Act, 1915, and Milk and Dairies Order, 1926.)*

R. Wooff, M.R.C.V.S.

PART-TIME OFFICERS.

Consulting Obstetric Physician :

J. M. Wyatt, M.B., B.S., F.R.C.S.

*Ophthalmic Surgeons :**(Maternity and Child Welfare, School Medical Service, Certification of Blind Persons.)*

Miss Jean M. Dollar, M.S., F.R.C.S., D.O.M.S.

E. F. King, M.B., Ch.B., F.R.C.S., D.O.M.S.

N. H. L. Ridley, M.A., M.B., B.Chir., F.R.C.S.

C. D. Shapland, M.B., B.S., M.R.C.P., F.R.C.S.

H. H. Skeoch, M.B., Ch.M., F.R.C.S., D.O.M.S.

*Assistant Medical Officers :**(Maternity and Child Welfare.)*

L. W. Hignett, M.B., C.M., D.P.H.

J. W. Poole, M.B., B.S.

Assistant Dental Officer (School Dental Treatment) :

Miss F. M. Goodman, L.D.S.

HOSPITALS, INSTITUTIONS AND SANATORIA.

NORTH MIDDLESEX COUNTY HOSPITAL.

Medical Superintendent :

Ivor Lewis, M.D., M.S., D.P.H.

Deputy Medical Superintendent and Obstetric Surgeon :

K. A. Hudson, M.B., Ch.M., M.C.O.G.

Physician :

C. A. Birch, M.D., M.R.C.P., D.P.H.

Surgeons :

R. L. Galloway, M.B., Ch.B., F.R.C.S.

H. O. Blauvelt, M.D., C.M., F.R.C.S.

Assistant Pathologist :

H. Rogers, M.D., Ch.B.

Assistant Medical Officers :

P. J. Nagle, M.B., B.Ch., D.A.

L. C. Bousfield, M.B., B.S.

Miss A. M. E. McCabe, M.D., B.Ch., B.A.O.,

Miss E. A. Pennycuik, M.B., Ch.B.

M.R.C.P.(I.), D.P.H.

Miss M. A. Bromhall, M.B., Ch.B., D.M.R.E.

M. Coke, M.R.C.P., M.R.C.S.

S. F. Smith, M.B., B.S.

R. J. Talbot, F.R.C.S.

Miss C. E. Field, M.D., B.S.

J. T. Fathi, M.S., F.R.C.S.

Mrs. E. S. Greenwood, M.R.C.S., L.R.C.P.

Matron :

Miss L. F. Dykes.

REDHILL COUNTY HOSPITAL.

Medical Superintendent :

J. N. Deacon, M.C., M.B., B.S.

Deputy Medical Superintendent :

J. H. Attwood, M.B., B.S., D.A.

Physician :

(Vacant.)

Surgeons :

D. B. Craig, F.R.C.S. (Edin.), D.L.O.

Obstetric Surgeon :

E. ap. I. Rosser, M.B., B.S., M.C.O.G.

R. Trevor Jones, B.Sc., M.B., B.S., F.R.C.S.,
(part-time).

Assistant Pathologist :

J. L. Hamilton-Paterson, M.D., B.S.

Assistant Medical Officers :

J. A. Carson, M.D., Ch.B.

L. R. Robson, M.B., Ch.B.

Matron :

Miss E. R. Wheeldon.

CENTRAL MIDDLESEX COUNTY HOSPITAL.

Medical Superintendent :

H. Carter, M.B., Ch.B., F.R.C.S., M.C.O.G.

Deputy Medical Superintendent and Senior Physician :

H. Joules, M.D., M.R.C.P.

Surgeons :

T. G. I. James, B.Sc., M.Ch., F.R.C.S.

N. M. Matheson, M.B., B.Ch., F.R.C.S., M.R.C.P.

Assistant Medical Officers :

A. D. Abdullah, M.B., Ch.M., M.R.C.P.

J. S. MacVine, M.B., B.S., F.R.C.S., M.C.O.G.

J. Sakula, M.D., B.S., M.R.C.P., D.C.H.

H. Canwarden, M.R.C.S., L.R.C.P., D.A., M.M.S.A.,

A. R. C. Rankin, M.B., B.Ch., D.A.

M.C.O.G.

H. W. Hall, M.B., B.S.

R. M. Yeates, M.B., B.S., F.R.C.S.

K. T. Hughes, M.B., B.S., M.R.C.P.

P. Berbrayer, M.D., M.C.P.S.

Matron :

Miss B. Gebhard.

HILLINGDON COUNTY HOSPITAL.

Medical Superintendent :

W. A. Steel, M.D., Ch.B., M.R.C.P.

Deputy Medical Superintendent and Surgeon :

L. Fatti, M.B., B.S., F.R.C.S.

Physician :

E. B. Jackson, M.D., M.R.C.P.

Assistant Medical Officers :

Miss J. Morgan, B.Sc., M.D., B.S., M.C.O.G.

H. J. V. Morton, M.A., M.B., B.Chir., D.A.

R. E. Glennie, M.B., Ch.B.

G. W. Duncan, M.R.C.S., L.R.C.P.

Matron :

Miss E. S. Laing.

WEST MIDDLESEX COUNTY HOSPITAL.

Medical Superintendent :

J. B. Cook, M.D., Ch.B., D.P.H.

Deputy Medical Superintendent :

Miss M. W. Warren, M.R.C.S., L.R.C.P.

Physicians :

T. S. Nelson, M.A., F.R.C.P.

M. M. Deane, M.D., M.R.C.P., D.P.M.

Surgeon :

W. G. Ferguson, M.S., F.R.C.S.

Obstetric Surgeon :

D. M. Stern, M.A., F.R.C.S., M.C.O.G.

Pathologist :

W. Broughton-Alcock, B.A., M.B.

Assistant Pathologist :

A. C. Counsell, M.B., B.S., D.P.H.

Assistant Medical Officers :

G. Stephen, M.B., Ch.B., F.R.C.S.

Miss I. M. Titcomb, M.A., B.M., B.Ch.

Miss S. Whitaker, M.B., B.S.

F. J. V. Jaensch, M.R.C.P., M.R.C.S.

W. R. Merrington, M.B., B.S., F.R.C.S.

J. A. Brocklebank, M.D., M.R.C.P.

D. A. Davies, M.B., B.S.

A. H. L. Baker, L.M.S.S.A., D.A.

A. B. McLean, M.B., B.S.

Matron :

Miss E. Huggins.

STAINES INSTITUTION.

Medical Officer (part-time) :

L. R. Pickett, M.R.C.S., L.R.C.P.

EDGBURY CONVALESCENT HOME, WOBURN SANDS.

Medical Officer (part-time) :

J. Richardson, M.R.C.S., L.R.C.P.

Matron :

Miss M. A. Bishop, R.R.C.

MIDDLESEX COUNTRY HOSPITAL, HAREFIELD PLACE.

Medical Officer :

W. A. Steel, M.D., M.R.C.P.

Matron :

(Vacant).

EDMONTON HOUSE, ENFIELD HOUSE, CHASE FARM, REDHILL INSTITUTION, PERCY HOUSE,
HILLINGDON INSTITUTION, WHITE WEBBS HOME, BELLGROVE HOME.

The medical care of patients and inmates in these institutions is provided by the medical
staffs of the hospitals set out above.

COUNTY SANATORIUM, HAREFIELD.

Medical Superintendent :

J. R. McGregor, M.B., Ch.B., D.P.H.

Acting Deputy Medical Superintendent :

K. R. Stokes, M.R.C.S., L.R.C.P.

Physician :

R. H. Fish, M.D., M.R.C.P.

Assistant Medical Officers :

D. G. M. Edwards, M.B., B.S., D.P.H.

V. C. Benson, M.A., M.R.C.S., L.R.C.P.

Matron :

Miss C. Woodward.

COUNTY SANATORIUM, CLARE HALL, SOUTH MIMMS.

Medical Superintendent :

F. A. H. Simmonds, M.A., M.B., B.Chir., D.P.H.

Deputy Medical Superintendent :

G. G. Kayne, M.D., B.S., M.R.C.P., D.P.H.

Assistant Medical Officer :

J. W. Craig, M.A., M.D., B.Ch., B.A.O. (resigned October, 1937).

A. G. Hounslow, M.D., B.S.

Matron :

Miss M. Brown.

PUBLIC VACCINATORS AND DISTRICT MEDICAL OFFICERS (PUBLIC ASSISTANCE).

District.	Name and Qualifications.
<i>North Middlesex—</i>	
Edmonton North	A. E. Tughan, L.R.C.S., L.R.C.P., L.R.F.P. & S.
„ South	J. Shaw, M.A., M.B., Ch.B.
Enfield Chase.. . . .	{ W. H. Nairne White, M.B., Ch.B. (D.M., only). A. Jephcott, B.A., M.R.C.S., L.R.C.P. (P.V. only).
„ Highway and Ponders End ..	
„ Town	
„	J. E. Hill, M.B., B.Ch.
„	A. Jephcott, B.A., M.R.C.S., L.R.C.P.
<i>North-East Middlesex—</i>	
Finchley North	S. R. Gleed, M.R.C.S., L.R.C.P.
„ South	L. Lawn, M.A., M.D., B.Ch.
Friern Barnet North.. . . .	G. P. Evans, M.R.C.S., L.R.C.P.
„ „ South.. . . .	{ I. S. Fox, M.B., Ch.B. (D.M.O. only). G. P. Evans M.R.C.S., L.R.C.P. (P.V. only).
„	
South Mimms	W. E. Hayes, M.B., B.Ch.
Southgate	G. A. Shepherd, M.B., Ch.B.
Winchmore Hill	S. R. Eccles Davies, B.A., M.R.C.S., L.R.C.P., D.P.H.
Wood Green	F. James, M.R.C.S., L.R.C.P.
<i>East Middlesex—</i>	
Highgate	E. F. Buckler, M.B., Ch.B.
Hornsey	R. S. Anderson, M.R.C.S., L.R.C.P.
Lower Tottenham East	J. Devine, L.R.C.P. & S.
„ „ West	A. Wilson, M.B., Ch.B.
Tottenham West Green	Miss Fanny Cattle, B.Sc., M.R.C.S., L.R.C.P.
„ South-West	E. C. Wallace, L.M., L.R.C.P. & S., I.
„ High Cross	M. J. Cronin, M.B., B.S., M.R.C.S., L.R.C.P.
<i>North-West Middlesex—</i>	
Burnt Oak and Watling Estate ..	Miss Margaret I. Little, M.R.C.S., L.R.C.P.
Edgware, Little Stanmore and Lower Hale	{ F. H. Stevenson, M.D., B.S., M.R.C.P. (D.M.O. only). G. N. Grose, M.A., B.Ch., M.R.C.S., L.R.C.P. (P.V. only.)
„	
Great Stanmore and Harrow Weald ..	H. A. Byworth, M.A., B.M., B.Ch.
Harrow	O. R. Tisdall, M.A., D.M., B.Ch.
Hendon Central	W. A. L. Dunlop, M.B., B.Ch., B.A.O.
„ South	R. W. Baron, M.B., Ch.B.
Kingsbury	Miss Mary H. Routledge, M.B., Ch.B., D.P.H.
Mill Hill	A. H. Morley, M.B., B.S.
Pinner.. . . .	M. J. Johnston, M.D., Ch.B.
Wealdstone	Miss Lucy Parker, M.D., B.S., M.R.C.P.
Wembley	H. E. Dyson, M.D., B.S.
<i>Central Middlesex—</i>	
Acton	H. Sparrow, M.A., M.R.C.S., L.R.C.P.
Harlesden Vaccination District ..	C. F. T. Scott, M.B., Ch.B.
Kilburn	P. Smith, M.D., B.S., D.P.H.
Willesden No. 1	{ H. G. Broadbridge, M.B., B.S. R. Aidin, M.D., B.Ch., D.T.M. P. Smith, M.D., B.S., D.P.H.
„ No. 2	
„ No. 3	
„	Medical Relief Districts
<i>South Middlesex—</i>	
Ealing and West Twyford	J. Gubbins, M.R.C.S., L.R.C.P.
Greenford, Hanwell and Perivale ..	A. M. Caverhill, M.D., Ch.B., D.T.M.
Northolt	W. Moodie, L.R.C.P., L.R.C.S.

District.	Name and Qualifications.
<i>South Middlesex—(contd.)—</i>	
Brentford	R. M. Moore, M.B., B.Ch., B.A.O.
Chiswick	J. C. C. Langford, M.R.C.S., L.R.C.P.
Heston and Hounslow	{ L. B. Christian, M.B., C.M. (P.V. only.) R. A. Galway, M.B., Ch.B. (D.M.O. only.)
<i>West Middlesex—</i>	
Cowley and Hillingdon	H. Vickers, M.R.C.S., L.R.C.P.
Harefield	E. Shipman, M.R.C.S., L.R.C.P.
Hayes	J. N. Parrott, M.R.C.S., L.R.C.P.
Norwood	J. McKenna, M.B., B.Ch.
Ruislip	D. D. Ritchie, M.A., M.D., Ch.B.
Uxbridge and Ickenham	W. T. Dobson, M.R.C.S., L.R.C.P.
West Drayton and Yiewsley	Miss Jessie G. A. Norman, M.R.C.S., L.R.C.P.
<i>South-West Middlesex—</i>	
Ashford	L. R. Pickett, M.R.C.S., L.R.C.P.
Bedfont, Feltham and Hanworth	V. C. Montgomery, M.B., B.Ch., B.A.O.
Cranford, Harlington, Sipson and Heathrow	P. Coffey, L.R.C.P., L.R.C.S.
Hampton	C. de Z. Marshall, M.R.C.S., L.R.C.P.
Hampton Wick	D. S. Poole, M.B., B.S., M.R.C.S., L.R.C.P.
Harmondsworth, Longford and Stanwell ..	J. A. Edwards, M.R.C.S., L.R.C.P.
Isleworth	W. W. Phillips, M.B., Ch.B.
Staines and Laleham	A. C. Mann, M.B., B.Ch.
Shepperton and Littleton	W. Sweetnam, B.A., M.B., B.Ch., B.A.O.
Sunbury	{ A. J. Reid Taylor, M.B., Ch.B. (D.M.O. only.) K. Wolferstan, M.R.C.S., L.R.C.P. (P.V. only.)
Teddington	C. G. A. Sadler, M.R.C.S., L.R.C.P.
Twickenham	W. L. Cassells, B.Sc., M.B., Ch.B.

Public Vaccinators for Hospitals and Institutions in the County.

Hospital or Institution.	Name and Qualifications.
North Middlesex County Hospital, Edmonton House, Enfield House and Chase Farm.	I. Lewis, M.D., M.S., D.P.H.
Redhill County Hospital and Redhill Institution	J. N. Deacon, M.C., M.B., B.S.
Staines Institution and Children's Home, Ashford	L. R. Pickett, M.R.C.S., L.R.C.P.
Hillingdon County Hospital and Hillingdon Institution ..	W. A. Steel, M.D., Ch.B., M.R.C.P.
Children's Home, Hillingdon (Bartram Lodge)	H. Vickers, M.R.C.S., L.R.C.P.
West Middlesex County Hospital; Central Children's Home, South Middlesex Area (Dundee House, Isleworth).	J. B. Cook, M.D., Ch.B., D.P.H.
Central Middlesex County Hospital; Children's Homes, Willesden Area	H. Carter, M.B., Ch.B., F.R.C.S., M.C.O.G.
Ashford Residential School (L.C.C.)	Muriel G. Evans, M.D., Ch.B., F.R.C.S.
Erskine Hill, Hendon Residential School (L.C.C.)	H. N. Payne, M.D., B.S., D.P.H.

SUMMARY OF IMPORTANT STATISTICS RELATING TO THE ADMINISTRATIVE COUNTY OF MIDDLESEX.

Area (including inland water)	148,691 acres.
Population 1931 (census)	1,638,728
„ 1937 (estimated for mid-year)	2,014,500
Number of structurally separate dwellings occupied, 1931 (census)	348,595
Number of private families, 1931 (census)	431,368
Rateable value, 1937 (1st April)	£19,386,300
Product of a penny rate, financial year 1937-38	£78,661
Live births—	Male. Female. Total.
Legitimate	15,150 14,339 29,489
Illegitimate	613 563 1,176
Birth-rate	15·2
Stillbirths	987
„ Rate per 1,000 total births	31·2
Deaths	19,781
Death-rate	9·8
Number of women dying from diseases and accidents of pregnancy and childbirth :—	
From sepsis	29
From other causes	56
Maternal mortality-rate per 1,000 live births	2·77
„ „ „ total „	2·69
Infantile mortality-rate per 1,000 live births :—	
Legitimate	46
Illegitimate	122
Total	49
Deaths from cancer (all ages)	2,917
„ measles (all ages)	13
„ whooping cough (all ages)	58
„ diarrhoea (under 2 years of age)	244

Administrative County of Middlesex.

ANNUAL REPORT OF THE COUNTY MEDICAL OFFICER FOR THE YEAR 1937.

NATURAL AND SOCIAL CONDITIONS.

AREA.—The area of the County of Middlesex, inclusive of inland water, is 148,691 acres.

There are no county boroughs in Middlesex, so that the area of the administrative county coincides with that of the geographical county.

On 1st April, 1937, the County of Middlesex (Twickenham) Review Order, made by the Minister of Health under Section 46 of the Local Government Act, 1929, came into operation. By the terms of this Order, the Urban Districts of Hampton, Hampton Wick and Teddington ceased to exist as separate local government areas and were incorporated in the Borough of Twickenham.

During the year, charters of incorporation were granted to the Urban Districts of Edmonton and Wembley.

At the close of 1937 there were 26 separate local government areas in the County as follows :—15 municipal boroughs with an area of 70,196 acres and 11 urban districts with an area of 78,495 acres. There are no rural districts in the County.

Orders made by the Minister of Health under Section 46 of the Local Government Act, 1929, effected minor boundary adjustments between the following local government areas :—Ealing and Willesden ; Hornsey, Finchley and Friern Barnet ; Twickenham, Sunbury and Feltham. Allowances for these alterations have been made in the table overleaf.

POPULATION.—According to the estimate of the Registrar-General, the population of the County of Middlesex now exceeds two millions. The population appears to have increased during 1937 at approximately the same rate as in the previous year, that is to say, at an average rate throughout the year of *over fourteen hundred persons per week*. This increase of population is by no means uniform over the whole County, being greatest in the peripheral zone and least in those parts of Middlesex which are nearest to London. In some of the local government areas on or near the border of London, notably the Boroughs of Brentford and Chiswick, Acton, Willesden, Hornsey, Wood Green and Tottenham, the calculations of the Registrar-General indicate that the population is becoming static and in some instances beginning to decline. These boroughs represent some of the parts of Middlesex which have longest been areas of extensive building development and it seems that saturation point in them is being reached.

The estimated population of the County of Middlesex at the middle of 1937 was 2,014,500, an increase of 74,100 above the estimated figure for the previous year. Of this number, 10,884 represents the actual natural increase of population, that is, the excess of births over deaths ; the balance of 63,216 is the estimated number of immigrants to Middlesex of persons from other parts of the country.

It must be borne in mind that the foregoing statements are framed upon *estimates* of the population based upon the 1931 census and not upon actual ascertained figures, and the same remark applies to many of the rates which will be considered in this section of the report. The Registrar-General, with the information at his disposal and his knowledge and experience, is in a better position than anyone else to form accurate estimates. Some of the factors governing the population of so rapidly growing an area as the County of Middlesex are, however, incalculable and it will not be until the census of 1941 that ascertained figures, as distinct from estimates, will be available.

The following table gives statistical information regarding the distribution of acreage and population within the administrative county, and takes into account the adjustments made during 1937 :—

ACREAGE AND POPULATION.

Boroughs and Urban Districts.	Acreage.	Population.							
		Census.		Censal Increase or Decrease, 1921-1931.				Estimated by Registrar- General, mid-1937.	
		1921.	1931.	Persons.		Percentage.			
				In- crease.	De- crease.	In- crease.	De- crease.		
Acton (<i>Borough</i>)	2,318	60,817	70,008	9,191	—	15·1	—	69,100	
Brentford and Chiswick (<i>Borough</i>)	2,333	58,499	63,217	4,718	—	8·1	—	62,020	
Ealing (<i>Borough</i>)	8,783	90,312	116,771	26,446	—	29·3	—	156,460	
Edmonton (<i>Borough</i>)	3,896	66,807	77,658	10,851	—	16·2	—	101,600	
Enfield	12,401	60,464	67,752	7,288	—	12·1	—	87,200	
Feltham	4,925	11,392	16,064	4,672	—	41·0	—	28,700	
Finchley (<i>Borough</i>)	3,475	46,628	59,113	12,440	—	26·7	—	64,525	
Friern Barnet	1,340	17,137	22,715	5,623	—	32·8	—	26,775	
Harrow	12,559	49,020	96,656	47,636	—	97·2	—	174,800	
Hayes and Harlington	5,160	9,042	22,969	13,927	—	154·0	—	39,770	
Hendon (<i>Borough</i>)	10,373	57,566	115,640	58,074	—	100·9	—	143,800	
Heston and Isleworth (<i>Borough</i>)	7,219	47,463	76,254	28,791	—	60·7	—	99,420	
Hornsey (<i>Borough</i>)	2,872	87,632	95,416	7,784	—	8·9	—	96,520	
Potters Bar	6,129	3,222	5,720	2,498	—	77·5	—	11,160	
Ruislip-Northwood	6,583	9,112	16,035	6,923	—	76·0	—	36,270	
Southall (<i>Borough</i>)	2,606	30,165	38,839	8,674	—	28·8	—	51,560	
Southgate (<i>Borough</i>)	3,763	39,525	56,063	16,538	—	41·8	—	66,230	
Staines	8,273	17,060	21,336	4,276	—	25·1	—	28,850	
Sunbury... ..	5,608	9,904	13,451	3,547	—	35·8	—	15,940	
Tottenham (<i>Borough</i>)	3,013	146,726	157,667	10,941	—	7·5	—	146,200	
Twickenham (<i>Borough</i>)	7,013	69,948	79,299	5,114	—	14·7	—	94,230	
Uxbridge	10,240	20,626	31,887	11,261	—	54·6	—	41,950	
Wembley (<i>Borough</i>)	6,292	18,239	65,799	47,560	—	260·8	—	114,700	
Willesden (<i>Borough</i>)	4,633	165,742	185,025	19,296	—	11·6	—	187,640	
Wood Green (<i>Borough</i>)	1,607	50,791	54,308	3,517	—	6·9	—	53,510	
Yiewsley and West Drayton ...	5,277	9,163	13,066	3,903	—	42·6	—	15,570	
The County	148,691	1,253,002	1,638,728	385,726	—	30·8	—	2,014,500	

In those areas of the County where changes in boundary have occurred during the year, the statistics supplied by the Registrar-General are composite figures comprising the records of the former area for the portion of the year prior to the date of change and those of the altered area for the remainder of the year. To take account of the fact that these records do not wholly relate to the entire year, a population figure for calculating rates has been supplied for each district.

BIRTHS AND BIRTH-RATES.—The corrected number of live births belonging to the County and occurring during 1937 was 30,665 (15,763 males and 14,902 females). This number is equivalent to a birth-rate of 15·2 per thousand of the population. The number of illegitimate births registered was 1,176 (613 males and 563 females), representing an illegitimate birth-rate of 0·58 per thousand of the population. Illegitimate births accounted for 3·8 per cent. of the total births.

The following table gives the birth statistics for the last five years for Middlesex, London, the Great Towns, and England and Wales :—

Year.	The County.		London.	Great Towns.	England and Wales.
	Live births.	Rate per 1,000 living.	Rate per 1,000 living.	Rate per 1,000 living.	Rate per 1,000 living.
1933	24,501	13·9	13·2	14·4	14·4
1934	26,376	14·6	13·2	14·7	14·8
1935	27,594	14·8	13·3	14·8	14·7
1936	29,110	15·0	13·6	14·9	14·8
1937	30,665	15·2	13·3	14·9	14·9

The financial crisis of 1931 and subsequent depression was reflected throughout the country in the birth-rate figures for 1933, in which year the rate dropped suddenly to the lowest ever recorded. Since that year there has been a slow but fairly general rise in birth-rate which has been somewhat more evident in Middlesex than in other parts of the country.

BIRTHS AND BIRTH-RATES IN EACH DISTRICT, 1937.

BOROUGHES AND URBAN DISTRICTS.	Net number.	Rate per 1,000 living.	BOROUGHES AND URBAN DISTRICTS.	Net number.	Rate per 1,000 living.
Feltham	673	23·4 (22·5)	Hampton Wick	12†	15·4 (11·3)
Staines	624	21·6 (18·5)	Twickenham (<i>Borough</i>) ..	1,265	15·1 (15·8)
Hayes and Harlington ..	852	21·4 (20·3)	Ealing (<i>Borough</i>)	2,320	14·9 (14·4)
Ruislip-Northwood ..	714	19·7 (17·7)	Heston and Isleworth (<i>Borough</i>)	1,483	14·9 (15·7)
Yiewsley and West Dray- ton	287	18·4 (16·7)	Finchley (<i>Borough</i>) ..	895	13·8 (13·0)
Harrow	3,098	17·7 (17·9)	Tottenham (<i>Borough</i>) ..	1,973	13·5 (13·0)
Potters Bar	198	17·7 (15·7)	Teddington	79†	13·4 (14·9)
Enfield	1,523	17·5 (16·7)	Acton (<i>Borough</i>)	886	12·8 (12·7)
Uxbridge	715	17·0 (18·2)	Hendon (<i>Borough</i>)	1,792	12·5 (13·0)
Willesden (<i>Borough</i>) ..	3,125	16·6 (15·4)	Brentford and Chiswick (<i>Borough</i>)	772	12·4 (13·3)
Wembley (<i>Borough</i>) ..	1,857	16·2 (16·1)	Friern Barnet	329	12·4 (12·9)
Southall (<i>Borough</i>) ..	814	15·8 (16·1)	Wood Green (<i>Borough</i>) ..	659	12·3 (13·1)
Edmonton (<i>Borough</i>) ..	1,595	15·7 (16·1)	Hornsey (<i>Borough</i>)	1,165	12·1 (12·0)
Sunbury	247	15·5 (18·4)	Southgate (<i>Borough</i>) ..	658	9·9 (10·1)
Hampton	55†	15·4 (15·1)			

The corresponding birth-rates for the year 1936 are shown in brackets.

† Relates to births for first quarter, 1937, only.

It will be noted that the districts in which the highest birth-rates are recorded are those situated at the periphery of the County and in which housing development is proceeding most rapidly. This is according to expectation, as new housing estates attract many young married people to live in the districts concerned. It might also be noted in passing that these are the districts which for the most part comprise the County Council's maternity and child welfare area.

The extent to which women in Middlesex are seeking institutional accommodation for their confinements is shown by the following figures which, although probably not complete, afford information as to the number of births belonging to Middlesex which have been ascertained as taking place in hospitals.

BIRTHS OCCURRING IN HOSPITALS, 1937.

Hospitals.	Number of Births.
<i>Middlesex County Hospitals—</i>	
North Middlesex County Hospital	1,887
Central Middlesex County Hospital	737
West Middlesex County Hospital	1,862
Redhill County Hospital	553
Hillingdon County Hospital	573
Staines Institution	69
	— 5,681
<i>Other County Hospitals—</i>	
Hertfordshire	226
London	18
	— 244
<i>Municipal Maternity Hospitals—</i>	
Chiswick and Ealing	542
Willesden	1,024
	— 1,566
<i>Voluntary Hospitals—</i>	
Queen Charlotte's Hospital	1,119
City of London Maternity Hospital	467
Salvation Army Mothers' Hospital	339
Royal Northern Hospital	231
Queen Mary's Maternity Hospital, Hampstead	281
Other voluntary hospitals	127
	— 2,564
Total	10,055

During recent years a great public demand has grown up for institutional maternity accommodation and year by year the number of women entering hospital for their confinements continues rapidly to increase. In the past three years the number of ascertained hospital births has increased from 6,415 to 10,055. The number of births known to have taken place in hospitals during 1937 represents 32 per cent. of the total Middlesex births which occurred. In addition it has been ascertained that 3,325 births or 15 per cent. of the total took place in private nursing homes (*see* page 40). In no less than 47 per cent. of cases, therefore, women obtained institutional accommodation of one kind or other for their confinements.

STILL-BIRTHS.—The number of still-births registered in 1937 was 987, equivalent to a rate of 31·2 per 1,000 total births, or 0·49 still-births per 1,000 population, as compared with a rate of 0·60 for the whole country.

DEATHS AND DEATH-RATES (ALL CAUSES).—The number of deaths belonging to the County which occurred during 1937 was 19,781, or 954 more than took place in the course of the previous year. This corresponds to a recorded death-rate of 9·8 per thousand persons living, as compared with a rate of 9·7 per thousand in 1936.

The figures for the last five years relating to Middlesex, London, the Great Towns and England and Wales as a whole are as follows :—

Year.	The County.		London.	Great Towns.	England and Wales.
	Deaths.	Rate per 1,000 living.	Rate per 1,000 living.	Rate per 1,000 living.	Rate per 1,000 living.
1933	17,066	9·7	12·2	12·2	12·3
1934	17,367	9·6	11·9	11·8	11·8
1935	17,254	9·2	11·4	11·8	11·7
1936	18,827	9·7	12·5	12·3	12·1
1937	19,781	9·8	12·3	12·5	12·4

One of the reasons for the favourable rate in Middlesex, as compared with that of England and Wales, is the fact that, according to the calculations of the Registrar-General, based upon the results of the last census, the population of this County contains less than its due proportion of persons at the two extremes of life, where the risk of mortality is greatest. When the age-distribution of the County is compared with that of the country as a whole, it is found that Middlesex has more than its share of young adults and middle-aged persons; and this circumstance needs to be taken into account when using death-rates as bases of comparison of the relative healthiness of different areas. In order to eliminate differences of age- and sex-distributions of populations and to enable truer comparisons to be drawn, the Registrar-General's Department has calculated for each county and county district a figure, the "comparability factor," which when multiplied by the "recorded" death-rate provides a "corrected" death-rate in which allowance has been made for differences in constitution of population.

The effect of applying the comparability factor (1·07) to the recorded death-rate (9·8) is to produce a corrected death-rate of 10·5, which still compares very favourably with that of England and Wales, which is 12·4.

The following table gives information as to the death-rate, both before and after correction, in each district in Middlesex, whilst on page 7 appears a graph illustrating the variations of birth- and death-rates which have occurred in Middlesex since the beginning of the present century.

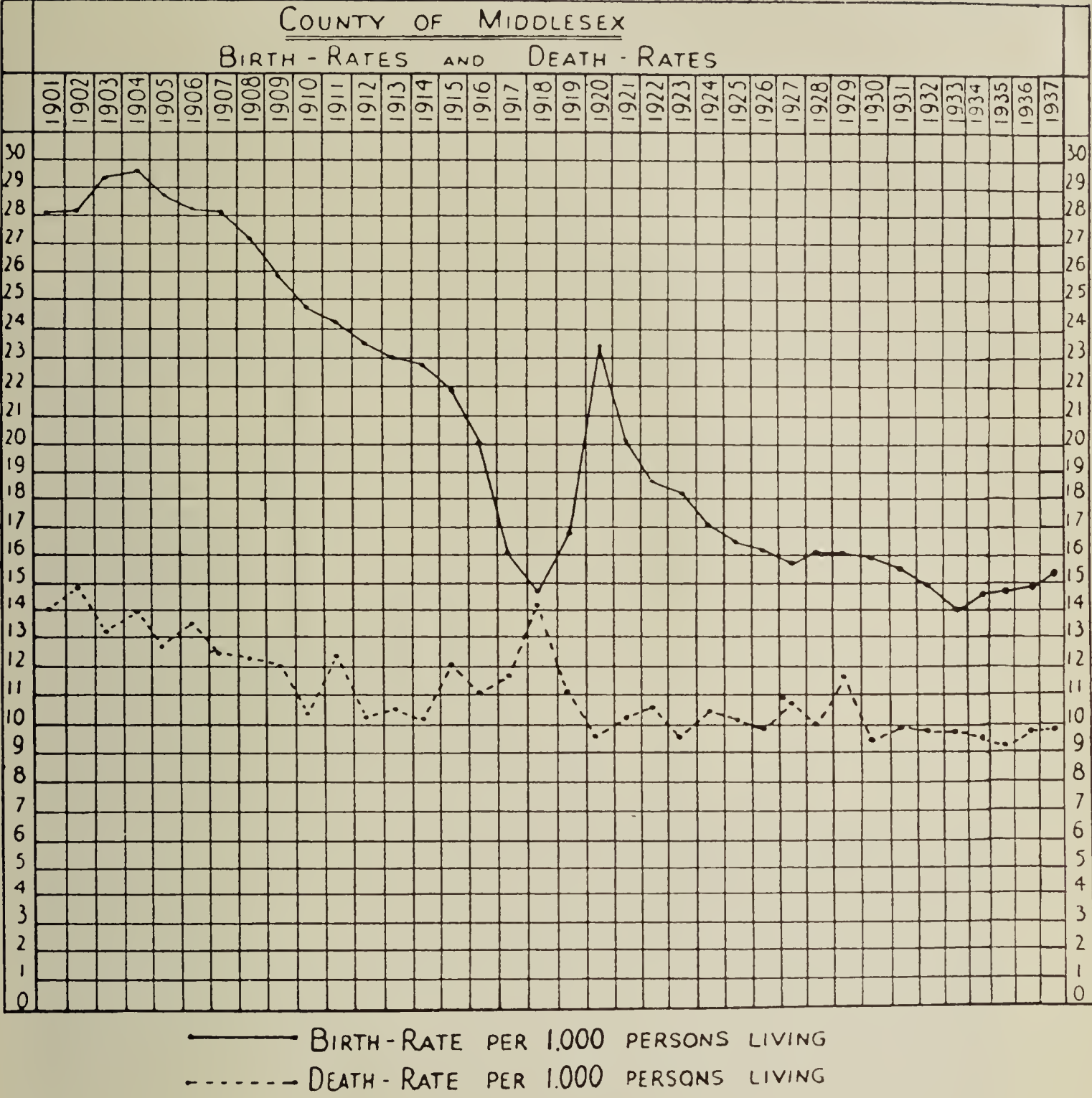
DEATHS AND DEATH-RATES IN EACH DISTRICT, 1937.

Boroughs and Urban Districts.	Under 1 year of age.		At all ages.			
	No.	Rate per 1,000 births.	No.	Recorded Rate per 1,000 living.	Com- parability Factor.	Corrected Rate per 1,000 living.
Acton (<i>Borough</i>)	51	58	750	10·9	1·08	11·8
Brentford and Chiswick (<i>Borough</i>)	40	52	714	11·5	1·02	11·7
Ealing (<i>Borough</i>)	106	46	1,502	9·6	1·01	9·7
Edmonton (<i>Borough</i>)	81	51	990	9·7	1·07	10·4
Enfield	67	44	913	10·5	1·02	10·7
Feltham	34	51	233	8·1	1·14	9·2
Finchley (<i>Borough</i>)	36	40	704	10·9	0·98	10·7
Friern Barnet	9	27	247	9·3	0·98	9·1
Hampton	3	55	49	13·7	0·96	13·2
Hampton Wick	1	83	20	25·6	0·95	24·3
Harrow	110	36	1,348	7·7	1·17	9·0
Hayes and Harlington	57	67	316	7·9	1·36	10·7
Hendon (<i>Borough</i>)	81	45	1,291	9·0	1·18	10·6
Heston and Isleworth (<i>Borough</i>) ..	59	40	895	9·0	1·05	9·4
Hornsey (<i>Borough</i>)	53	45	1,153	11·9	0·91	10·8
Potters Bar	11	56	84	7·5	1·05	7·9
Ruislip-Northwood	34	48	298	8·2	1·10	9·0
Southall (<i>Borough</i>)	48	59	474	9·2	1·14	10·5
Southgate (<i>Borough</i>)	28	43	716	10·8	0·98	10·6
Staines	34	54	280	9·7	0·95	9·2
Sunbury	10	40	182	11·4	1·00	11·4
Teddington	4	51	96	16·3	0·98	16·0
Tottenham (<i>Borough</i>)	126	64	1,617	11·1	1·13	12·5
Twickenham (<i>Borough</i>)	42	33	880	10·5	0·99	10·4
Uxbridge	41	57	435	10·4	1·08	11·2
Wembley (<i>Borough</i>)	81	44	838	7·3	1·26	9·2
Willesden (<i>Borough</i>)	199	64	2,004	10·7	1·09	11·7
Wood Green (<i>Borough</i>)	32	49	593	11·1	1·01	11·2
Yiewsley and West Drayton ..	16	56	159	10·2	1·17	11·9
The County	1,494	49	19,781	9·8	1·07	10·5

Detailed information as to the different diseases which contributed towards the total number of deaths and the age-groups in which these deaths occurred is given in the following table :—

CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE IN THE ADMINISTRATIVE
COUNTY OF MIDDLESEX, 1937.

Causes of Death.	All Ages.	0—	1—	2—	5—	15—	25—	35—	45—	55—	65—	75—
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1. Typhoid and paratyphoid fevers	5	—	—	—	—	—	3	1	—	—	—	1
2. Measles	13	4	4	3	1	1	—	—	—	—	—	—
3. Scarlet fever	14	—	3	6	1	2	1	—	1	—	—	—
4. Whooping cough	58	24	16	14	3	1	—	—	—	—	—	—
5. Diphtheria	79	3	3	22	45	2	2	1	—	1	—	—
6. Influenza	736	13	13	5	1	15	31	66	91	123	162	216
7. Encephalitis lethargica	20	—	—	—	—	—	2	3	6	4	5	—
8. Cerebro-spinal fever	33	10	3	2	5	7	4	1	1	—	—	—
9. Tuberculosis of respira- tory system	1,008	2	3	1	10	191	260	209	159	118	49	6
10. Other tuberculous diseases	169	14	6	14	36	32	19	14	15	10	6	3
11. Syphilis	38	2	—	—	—	1	—	6	8	13	7	1
12. General paralysis of the insane, tabes dorsalis	55	—	—	—	1	—	4	6	19	13	10	2
13. Cancer, malignant disease	2,917	—	—	5	12	13	43	170	450	861	832	531
14. Diabetes	267	—	2	—	6	4	5	10	18	52	101	69
15. Cerebral hæmorrhage, &c.	838	—	—	—	—	1	4	8	61	170	287	307
16. Heart disease	4,824	1	2	1	14	39	79	129	347	767	1,376	2,069
17. Aneurysm	86	—	—	—	2	1	3	7	15	21	18	19
18. Other circulatory diseases	1,042	—	1	—	1	1	1	14	58	169	328	469
19. Bronchitis	606	32	3	2	4	6	5	19	48	81	133	273
20. Pneumonia (all forms)	1,260	237	55	52	20	25	49	80	137	183	201	221
21. Other respiratory diseases	187	6	4	1	7	12	10	18	25	33	26	45
22. Peptic ulcer	223	—	—	—	—	4	10	24	62	66	43	14
23. Diarrhœa, &c.	313	229	15	4	4	3	15	8	10	6	6	13
24. Appendicitis	134	—	1	3	17	20	15	14	17	19	18	10
25. Cirrhosis of liver	56	—	—	—	—	—	—	2	5	19	24	6
26. Other diseases of liver, &c.	69	—	—	—	1	1	3	3	5	14	19	23
27. Other digestive diseases..	325	21	2	3	23	16	20	22	40	51	62	65
28. Acute and chronic nephritis	514	4	2	1	9	22	28	50	48	107	123	120
29. Puerperal sepsis	29	—	—	—	—	3	20	5	1	—	—	—
30. Other puerperal causes ..	56	—	—	—	—	10	26	19	1	—	—	—
31. Congenital debility, pre- mature birth, malforma- tions, &c... .. .	767	748	6	1	4	5	2	1	—	—	—	—
32. Senility	464	—	—	—	—	—	—	—	—	3	69	392
33. Suicide	255	—	—	—	2	26	52	45	35	54	31	10
34. Other violence	718	58	17	20	58	92	78	48	62	68	81	136
35. Other defined diseases ..	1,591	86	10	28	81	80	88	151	175	250	317	325
36. Causes ill-defined, or un- known	12	—	—	—	—	1	—	—	2	1	3	5
All causes	19,781	1,494	171	188	368	637	882	1,154	1,922	3,277	4,337	5,351



The five principal conditions contributing to the death-rate, which together are responsible for more than half the total deaths, are set out below. The order of their influence upon the death-rate has remained fairly constant for a number of years, but the death-rate from tuberculosis shows a definite decrease for the year 1937, and is, in fact, the lowest ever recorded for the County.

Condition.	1933.	1934.	1935.	1936.	1937.
Heart disease	2·16	2·22	2·24	2·41	2·39
Cancer	1·37	1·37	1·33	1·43	1·45
Tuberculosis (all forms)	0·70	0·70	0·64	0·65	0·58
Pneumonia (all forms)	0·64	0·62	0·53	0·64	0·63
Cerebral hæmorrhage, &c.	0·43	0·43	0·43	0·42	0·42

The death-rate from cancer (1·45 per 1,000 persons living) shows a slight increase as compared with the previous year, but is well below the rate obtaining in the country as a whole (1·63).

Infantile Mortality.—During 1937 the deaths of 1,494 infants below the age of one year were registered, equivalent to an infantile mortality rate of 49 per 1,000 live births. During the past five years the infantile mortality rate for Middlesex has been remarkably constant and has been maintained during this period consistently below 50 per 1,000 live births. This low figure, sustained over so considerable a period, is a matter of great satisfaction and is a great tribute to the efficiency of the health services both of the County Council and of the constituent local authorities in Middlesex.

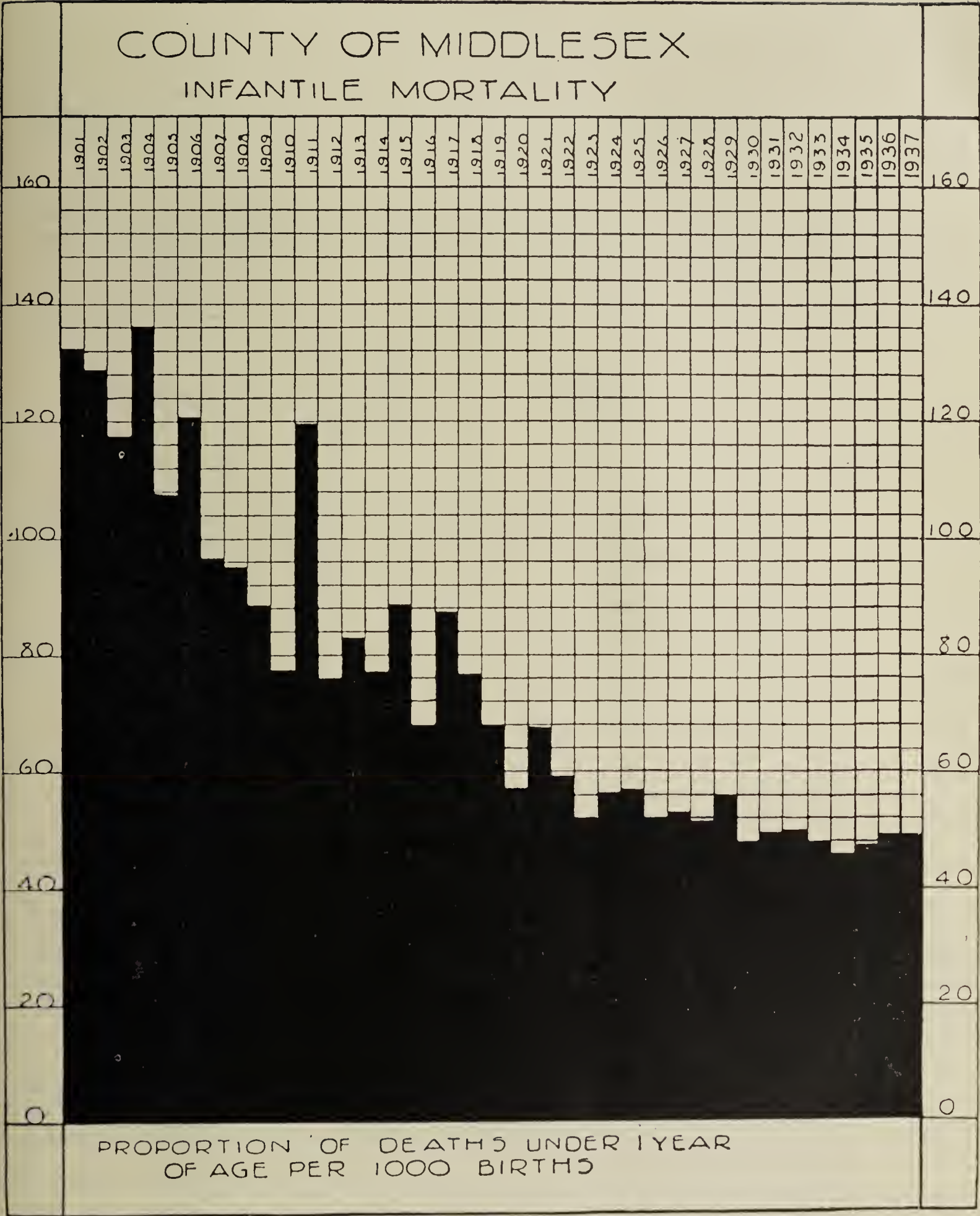
Of the 1,494 infantile deaths, 748 or almost exactly one half, were due to congenital or developmental conditions.

The following table gives comparative information as to infantile deaths and death-rates in Middlesex, London, the Great Towns, and England and Wales, whilst the diagram on page 9 illustrates graphically the variations in the infantile mortality rate for Middlesex which have occurred since the year 1901.

Year.	The County.			London.	Great Towns.	England and Wales.
	Births.	Deaths under 1 year.	Rate per 1,000 live births.	Rate per 1,000 live births.	Rate per 1,000 live births.	Rate per 1,000 live births.
1933	24,501	1,172	48	59	67	64
1934	26,376	1,201	45·5	67	63	59
1935	27,594	1,313	47·6	58	62	57
1936	29,110	1,434	49	66	63	59
1937	30,665	1,494	49	60	62	58

The composite table on page 5 records the infantile deaths and death-rates in each district in the County.

The infantile mortality rate for that area of the County in which the County Council is the maternity and child welfare authority was 53·1 per 1,000 live births.



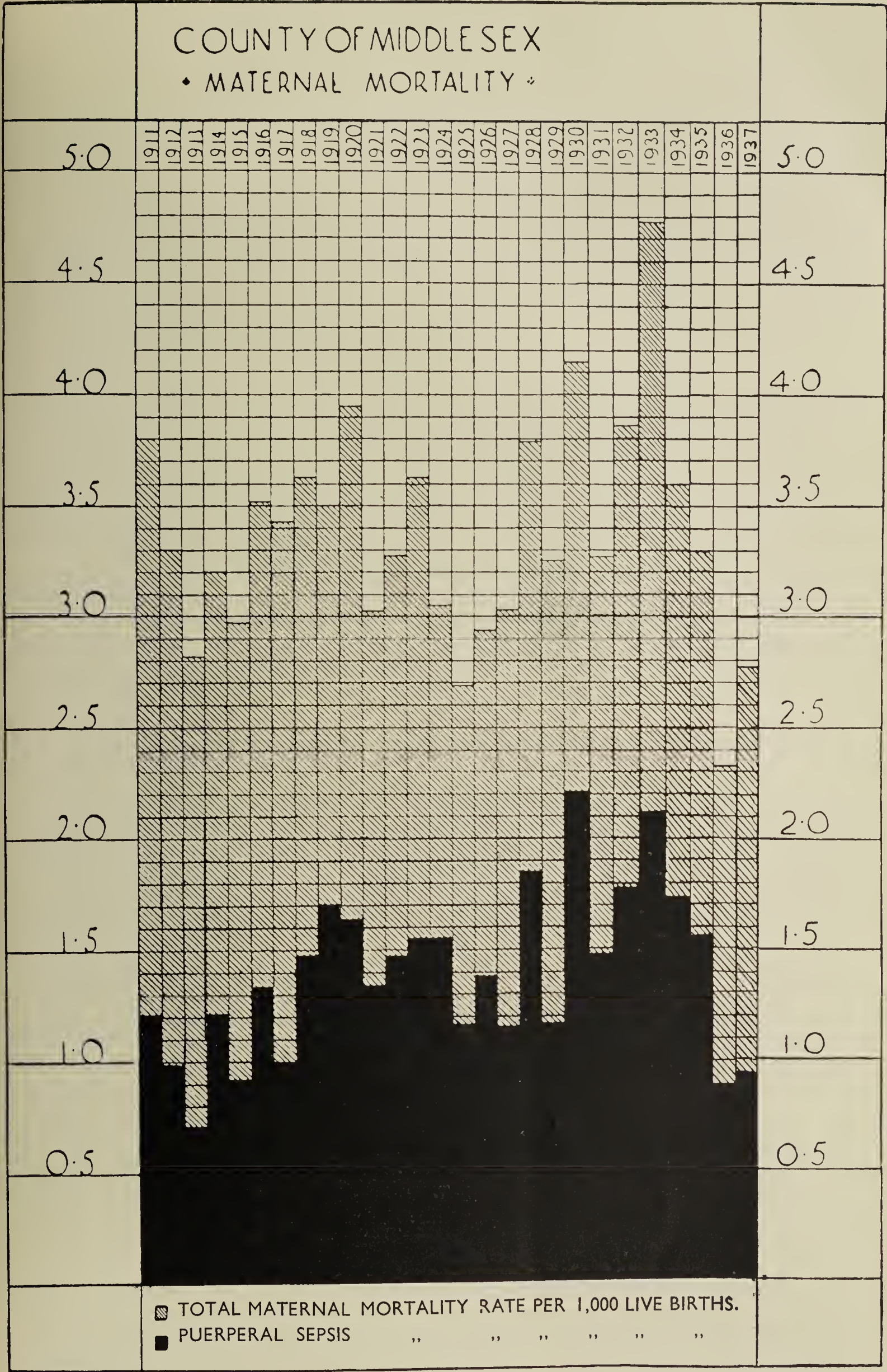
Maternal Mortality.—During 1937 the deaths of 85 women occurred from causes connected with pregnancy and child-birth, corresponding to a maternal mortality rate of 2·77 maternal deaths per 1,000 live births. On only two occasions has a lower rate for the County been recorded, namely, in 1925 (2·69) and 1936, when the extremely low record figure of 2·34 was established. The corresponding figures for the country as a whole have been satisfactorily declining during the past three years, and in 1937 a new record low figure of 3·23 was attained. The Middlesex maternal mortality rate, therefore, whilst not giving such cause for gratification as was the case in 1936, still maintains a satisfactory position relative to the rate for the whole country in as much as the rate for the County in 1937 is a substantially lower one than has ever been recorded for England and Wales. With the development of the County Council's policy of providing greatly increased numbers of maternity beds in hospitals and the improved standard of domiciliary midwifery which should result from the operation of the Midwives Act, 1936, further improvements in the maternal mortality rate in this County are to be hoped for in years to come.

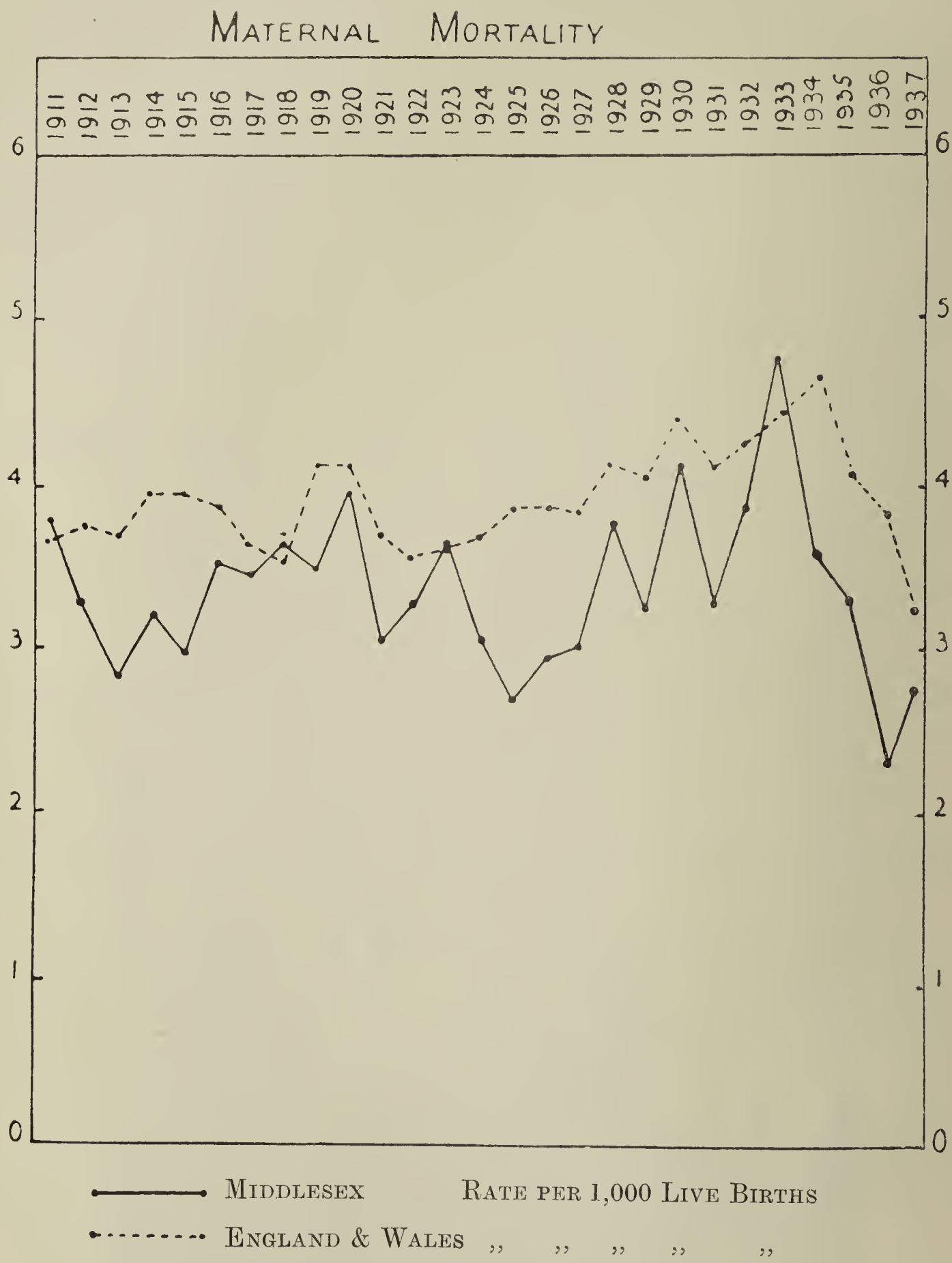
Maternal deaths are classified by the Registrar General into two principal groups: those due to puerperal sepsis and those attributable to other accidents and diseases of pregnancy and parturition. The following table gives information regarding maternal deaths, classified in these two categories during the past five years:—

Year.	Puerperal sepsis.		Other accidents and diseases of pregnancy and parturition.		Total.	
	Number of deaths.	Rate per 1,000 live births.	Number of deaths.	Rate per 1,000 live births.	Maternal deaths.	Maternal mortality rate.
1933	52	2·12	65	2·65	117	4·77
1934	46	1·74	49	1·86	95	3·60
1935	43	1·56	48	1·74	91	3·30
1936	26	0·89	42	1·44	68	2·34
1937	29	0·95	56	1·83	85	2·77

The relatively low maternal mortality rate of the past two years is mainly attributable to a very definite decrease in the number of deaths from puerperal sepsis. In each of the last two years the puerperal sepsis death-rate has been less than one maternal death per 1,000 live births. There can be little doubt that the greatly improved treatment of the condition, which has been brought about by the discovery and application to obstetric practice of sulphanilamide compounds, has materially contributed to this satisfactory result.

On page 11 appears a diagram illustrating the variations which have taken place in the maternal mortality rate in Middlesex since the year 1911, and on page 12 is a graph indicating the maternal mortality rates, year by year, for Middlesex and comparing them with the corresponding rates for the whole of England and Wales.





General Hospitals.

Whilst no outstanding modifications of policy were introduced during 1937, steady progress was made in many directions in the development of the County Council's general hospital service. The greatest difficulty experienced during the year was in connection with the shortage of hospital beds, and it must be emphasized that this problem is one which does not admit of rapid or easy solution, but depends upon a very carefully planned and co-ordinated long-term scheme of development and extension. At the time the County Council took over from the late Boards of Guardians the five general hospitals in the County, accommodation was already barely sufficient to enable the County Council to carry out its statutory duty to provide for the sick poor. Some years before the passage of the Local Government Act of 1929, the late Boards of Guardians, fully realizing that their days were numbered, very rightly hesitated to put into operation schemes of development which might well not have accorded with the policy of their successors. Following closely upon the transfer of functions in 1930, and before the County Council had had time and opportunity to take stock of the position, came the financial crisis of 1931 which quenched all hope of undertaking any schemes of extension. It was some years, therefore, before the County Council could put forward any substantial effort to overtake the arrears which already were apparent at the time the general hospitals came into the possession of the County Council in April, 1930.

Pressure on the County Council's hospital accommodation continued unabated and was even if possible, accentuated, during parts of 1937. This pressure placed a great strain upon the staffs of all the county hospitals but perhaps particularly upon that of Hillingdon County Hospital, which, as the smallest hospital in the Council's service in spite of its great turnover of work, does not possess the resources and elasticity of the larger hospitals when called upon to meet the abnormal demands which are made upon it. There are a number of causes which have contributed to the ever-increasing demands made upon the Council's general hospital service. Among these may be mentioned, first, the prodigious growth of the population of the County; second, the complete divorce of the hospitals from the Poor Law, so that admission thereto no longer entails any of the objections—real or sentimental—with which the Poor Law has for so long been associated; third, the growing appreciation by the people of the County of the first-class service which the Council's general hospitals render. It is indeed a matter of gratification that the ratepayers of Middlesex, irrespective of class or means, are so eager to make use of the hospital service for which they pay through their rates; and this result is due to the great reputation which the hospitals have justly acquired among the medical practitioners and their patients.

Extensions.—Among the measures of relief which during 1937 came into operation and gave some much-needed additional accommodation, may be mentioned the following:—

At Hillingdon County Hospital a new ward block for an additional 67 patients was opened in November, together with a new operating theatre suite which took the place of the unsatisfactory extemporized theatre which previously had had to serve this rapidly-growing hospital. This theatre and ward block incorporate the most modern ideas of hospital construction, and are in every way a credit to the County Council. By way of giving further relief to Hillingdon, the Council approved the erection of a temporary block to contain 60 beds for children. This was rapidly erected, and came into use early in 1938.

Reference was made in my report for 1936 to the County Council's decision very largely to rebuild North Middlesex County Hospital on the site of Edmonton House, which is to be demolished. A scheme of this magnitude, however, will naturally take some years to complete, and in the meantime some further accommodation was provided in 1937 by the erection of two temporary buildings known as South Ward (females) and North Ward (males) containing 28 beds each.

Edgbury Convalescent Home, Woburn Sands, was enlarged from 76 beds to 100, the work being completed and the new beds coming into use in July, 1937.

The County Council were fortunate in securing a small hospital, already built and equipped, at Bushey Heath. This hospital, which had been erected by private enterprise as a nursing home known as the Bushey Heath Clinic, came upon the market in the summer of 1937, and was promptly purchased by the County Council, complete with its furniture and equipment, for the sum of £30,000, with the intention that it should be used as a country branch hospital to relieve to some extent the pressure on the other county hospitals, particularly Redhill, which is only three or four miles away. The clinic at Bushey Heath contained one large ward, 11 two-bedded wards and 11 single wards, together with a modern operating theatre, X-ray plant, pathological laboratory, and staff quarters. After the purchase, it was realised, however, that the accommodation lent itself so admirably for maternity purposes that the County Council ultimately decided that, in view of the very great need for additional maternity beds, they would use Bushey Clinic as a maternity unit until more *ad hoc* maternity accommodation had been built. It was decided that the Clinic should be regarded as an annexe of Redhill County Hospital, and be under the control of the Medical Superintendent, Obstetrical Surgeon,

and Steward of the latter hospital. A resident medical officer, matron, and nursing staff were appointed, some necessary structural alterations completed, and the Clinic, under the name of the Middlesex County Maternity Hospital, received its first patients on 1st January, 1938. The approved accommodation of the Middlesex County Maternity Hospital, Bushey Heath, provides for 48 mothers and their babies.

Whilst the above further extensions, designed to give immediate relief, were being proceeded with, progress was being made with the Council's long-term policy for hospital provision. The Council approved the purchase of a suitable site in the north-east portion of the County for the erection of a new hospital, probably in the Finchley area, and a number of sites also were visited in the neighbourhood of South Harrow and Northolt, with a similar end in view. At West Middlesex County Hospital approval was obtained from the Court of Quarter Sessions for the closing of certain public footpaths through the hospital grounds, with a view to planning the most suitable extensions to the hospital which could be devised, having regard to the many difficulties which the site presents.

In December, the Council approved in principle the proposal to complete the development of Hillingdon County Hospital by the erection of the following accommodation :—

- (1) Main block of administrative offices, out-patient department, clinics, special departments, and surgical units with theatres and beds for post-operative and night admissions ;
- (2) three five-storey ward blocks containing a total of some 400 beds ;
- (3) a maternity unit of approximately 80 beds, and
- (4) a block of about 300 beds for chronic cases.

During the year the Council purchased Netley Castle, Southampton, for adaptation as a convalescent home for men, and the Clarence Hotel, Mundesley, with a view to using this as a convalescent home for children, some of whom might be accompanied by their mothers.

Among alterations and improvements to existing hospital buildings during the course of 1937 may be mentioned the modernization and enlargement of the Mental Block at Central Middlesex County Hospital, at a cost of some £5,000, including furniture. The block was opened during the course of the year. Work also was started on the modernization of A and B Blocks, i.e. the wards for the accommodation of 175 patients suffering from acute medical and surgical conditions, at Central Middlesex County Hospital. The tender for this work was approximately £25,000, and includes structural alterations and very radical improvements in the heating, electrical, gas, steam, refrigeration, and wireless services. At West Middlesex County Hospital some enlargement was made to the temporary building at which the pathological department was housed, and new X-ray apparatus was installed at a cost of approximately £3,500.

Staff.—So far the improvements and extensions referred to in this section of the report have dealt entirely with premises and equipment. Important as these matters are, the Council from the first has fully recognised that the success or otherwise of its hospital policy depends primarily upon the skill and devotion to duty of its medical, nursing and ancillary staffs. To this end, the Council from the first has given a great deal of thought to devising salaries and conditions of service that would attract to, and retain in, the Council's employment men and women of the highest professional attainments and character ; and they have spared no efforts to do all in their power to secure the comfort and contentment of their staff. A result of this enlightened policy is apparent in the very high standard of work being carried on at the Council's hospitals.

Of staff movements during the year, mention must be made of the appointment of a Senior Surgeon to the staff of Redhill County Hospital ; a Senior Obstetric surgeon, a Physician (Grade 2), and an Assistant Pathologist at West Middlesex County Hospital.

At the close of the year, Dr. A. W. Gregorson, M.D., F.R.F.P.S., Deputy Medical Superintendent of the North Middlesex County Hospital, retired on superannuation. Dr. Gregorson had given many years of loyal and devoted service to the County Council and its predecessors, and was in no small way responsible for the high reputation which North Middlesex County Hospital has deservedly acquired. His absence will be keenly felt. Dr. Gregorson was succeeded as Deputy Medical Superintendent by Dr. Kenneth Hudson, M.B., Ch.M., M.C.O.G., the Senior Obstetric Surgeon at North Middlesex County Hospital.

The service suffered a great loss in June by the sudden death of Mr. Shorney Webb, M.S., F.R.C.S., Senior Surgeon at the West Middlesex County Hospital. Mr. Shorney Webb was a brilliant surgeon and had gifts, both professional and personal, of a very high order.

Reference must be made to a decision of the Council which may have far-reaching effects. This resulted in agreement being reached between the Council and the authorities of the West London Hospital, which has recently become a teaching school in the Medical Faculty of the University of London.

Under this arrangement the teaching in obstetrics of medical students of the West London Hospital Medical School will be undertaken in the maternity department of West Middlesex County Hospital. It is hoped that this arrangement may be the precursor of others, whereby the vast and valuable clinical material in the Council's general hospitals may become available for teaching purposes.

Reference was made in my report for 1936, to the fact that in that year the County Council succeeded in removing its hospitals from Poor Law administration and placed them under Public Health control. A further step to remove Poor Law influence from the Council's hospitals was taken in 1937 in the form of agreements with the neighbouring Counties of Surrey and Essex. By the terms of these agreements, which were reciprocal, Middlesex patients admitted into Public Health hospitals in Surrey or Essex will be deemed to be Public Health patients, and the cost of their maintenance, so far as it is not recoverable from the patients themselves or, in the case of road traffic accidents, from insurance companies, will be borne by the Middlesex County Council. In determining who are Middlesex patients, regard only will be had to their ordinary place of residence and not to Poor Law settlement.

A summary of the work carried out at the various County hospitals is set out on the following pages, and detailed information with regard to each hospital will be found in the appendices to this report. It should be added that, in addition to the record of treatment contained in the summary, 433 persons were sent by the County Council to convalescent homes not belonging to the County Council, 116 to special hospitals and homes, and 22 to epileptic colonies. The total number of persons maintained in these establishments by the Council at the close of 1937 was :—

Convalescent homes	..	..	..	..	..	..	..	21
Special hospitals and homes	..	..	..	..	..	..	..	49
Epileptic colonies	..	..	..	..	..	..	..	121

SUMMARY OF RETURNS RELATING TO THE INSTITUTIONAL TREATMENT OF THE SICK PREPARED BY THE MEDICAL SUPERINTENDENTS AND MEDICAL OFFICERS.

North Middlesex County Hospital.

ACCOMMODATION FOR THE SICK, MATERNITY AND MENTAL CASES AND THE NUMBER OF BEDS OCCUPIED ON 31ST DECEMBER, 1937.

Classification of Wards.	Number of Wards.	BEDS.							
		MEN.		WOMEN.		CHILDREN (Under 16).		Total.	
		Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.
Medical	5	98	114	87	88	—	—	185	202
Surgical	7	106	104	134	116	—	—	240	220
Chronic sick*	9	105	57	218	206	—	—	323	263
Children	3	—	—	—	—	117	125	117	125
Tuberculosis ..	—	—	22	—	27	—	1	—	50
Maternity block..	2	—	—	90	95	—	—	90	95
Mental	2	19	1	21	5	—	—	40	6
Mental Defectives	—	—	2	—	—	—	—	—	2
Epilepsy	—	—	2	—	3	—	—	—	5
Senile Dementia..	1	—	15	65	45	—	—	65	60
TOTAL	29	328	317	615	585	117	126	1,060	1,028

* Patients needing hospital treatment because they are suffering from some chronic disease ; also aged infirm persons whose medical and nursing needs approximate to those of chronic patients.

Not included in above table :—

20 balcony beds (available in summer only) for tuberculous patients Occupied 31st December, Nil.
66 cots for maternity infants , , , , 65.

Extent of Provision for Out-Patients.

Nature and scope of the out-patient provision for continuation of treatment, emergency treatment, consultations or otherwise.	The out-patient department provides for treatment of casualties, after-care, consultations and treatment in special departments. These departments are as follows :— (1) General medical ; (2) General surgical ; (3) Ear, nose and throat ; (4) Ophthalmic ; (5) Massage ; (6) Ante-natal ; (7) Gynæcological ; (8) Casualty ; (9) Dental ; (10) Radium and deep and superficial X-ray therapy ; (11) Radiological (diagnostic) ; (12) Fracture ; (13) Varicose veins ; (14) Electro-therapeutic ; (15) Ultra-violet light ; (16) Psychiatric.
Total number of persons seen in the out-patient department.	18,362 (excluding ante-natal cases).
Number of these persons who were admitted for in-patient treatment.	Figures not available.
Number of these persons who had received in-patient treatment.	1,472
Total number of attendances in the out-patient department.	105,899 (excluding ante-natal cases).
Ante-natal clinic	<div><div>Number of women seen</div><div>2,558</div><div>Total number of attendances.</div><div>10,812</div></div>

Redhill County Hospital.

ACCOMMODATION FOR THE SICK AND MATERNITY CASES, AND THE NUMBER OF BEDS OCCUPIED ON 31ST DECEMBER, 1937.

Classification of Wards.	Number of Wards.	BEDS.							
		MEN.		WOMEN.		CHILDREN. (Under 16).		Total.	
		Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.
Medical	2	33	28	33	30	—	—	66	58
Surgical	2	34	27	31	28	—	—	65	55
Children	1	—	—	—	—	28	40	28	40
Tuberculosis ..	—	—	2	—	—	—	—	—	2
Isolation (Maternity) ..	1	—	—	3	3	3	1	6	4
Maternity	1	—	—	21	25	—	—	21	25
Other	2	5	—	8	1	6	17	19	18
Total	9	72	57	96	87	37	58	205	202

Not included in above table :—
20 cots for maternity infants Occupied 31st December, 24.

Extent of provision for Out-Patients.

Nature and scope of the out-patient provision for continuation of treatment, emergency treatment, consultations or otherwise.	In-patients transferred to out-patients, casualties and patients seen for consultation, or otherwise, are seen in the following out-patient departments :—General medical, general surgical, ear, nose and throat, X-ray, massage, electrotherapeutic and ultra-violet light, daily; ante-natal, four times weekly; orthopædic and dental, each twice weekly; children's clinic, post-natal, head injury clinic, varicose vein clinic, genito-urinary clinic, gynæcological clinic and skin clinic each once weekly.		
Total number of persons seen in the out-patient department.	11,346	(excluding ante-natal cases).	
Number of these persons who were admitted for in-patient treatment.	777	do.	do.
Number of these persons who had received in-patient treatment.	1,548		
Total number of attendances in the out-patient department.	39,381	do.	do.
Ante-natal clinic {	Number of women seen	1,017	
	Total number of attendances.	4,836	

Central Middlesex County Hospital.

ACCOMMODATION FOR THE SICK, MATERNITY AND MENTAL CASES, AND THE NUMBER OF BEDS OCCUPIED ON 31ST DECEMBER, 1937.

Classification of Wards.	Number of Wards.	BEDS.							
		MEN.		WOMEN.		CHILDREN. (Under 16).		Total.	
		Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.
Medical	9	74	74	138	83	—	12	212	169
Surgical	7	70	59	106	79	—	14	176	152
Chronic sick ..	10	138	116	180	174	—	—	318	290
Children	3	—	—	—	—	122	116	122	116
Tuberculosis ..	2	10	9	10	11	—	—	20	20
Maternity	1	—	—	28	22	—	—	28	22
Mental	2	7	3	7	5	—	—	14	8
Total	34	299	261	469	374	122	142	890	777

Not included in above table :—

28 cots for maternity infants Occupied 31st December, 23.

Extent of provision for Out-Patients.

Nature and scope of the out-patient provision for continuation of treatment, emergency treatment, consultations or otherwise.	Casualties, massage, electrical treatment, X-ray, after-treatment of injuries, psychiatric, ante-natal, post-natal, dental, pædiatric.		
Total number of persons seen in the out-patient department.	8,892	(excluding ante-natal cases).	
Number of these persons who were admitted for in-patient treatment.	234	do.	do.
Number of these persons who had received in-patient treatment.	2,442		
Total number of attendances in the out-patient department.	30,791	do.	do.
Ante-natal clinic	{ Number of women seen .. 876		
	{ Total number of attendances 3,271		

Hillingdon County Hospital.

ACCOMMODATION FOR THE SICK AND MATERNITY CASES, AND THE NUMBER OF BEDS OCCUPIED ON 31ST DECEMBER, 1937.

Classification of Wards.	Number of Wards.	BEDS.							
		MEN.		WOMEN.		CHILDREN (Under 16).		Total.	
		Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.
Medical	2	17	23	17	10	—	12	34	45
Surgical	2	32	24	33	25	—	8	65	57
Children	1	—	—	—	—	17	24	17	24
Tuberculosis	—	—	3	—	4	—	—	—	7
Maternity	1	—	—	12	17	—	—	12	17
Total	6	49	50	62	56	17	44	128	150*

* This number is in excess of beds provided owing to extra beds crowded into sick wards.

Not included in above table :—

12 cots for maternity infants Occupied 31st December, 12.

Extent of provision for Out-Patients.

Nature and scope of the out-patient provision for continuation of treatment, emergency treatment, consultations or otherwise.

Orthopædic clinic, urological clinic, ear, nose and throat clinic, general medical clinic, general surgical clinic, casualties, massage, ante-natal.

Total number of persons seen in the out-patient department, .. 5,337 (excluding ante-natal cases).

Number of these persons who were admitted for in-patient treatment, 784 do. do.

Number of these persons who had received in-patient treatment, .. 711

Total number of attendances in the out-patient department, ..27,241 do. do.

Ante-natal clinic { Number of women seen, 831.
Total number of attendances, 3,652.

West Middlesex County Hospital.

ACCOMMODATION FOR THE SICK, MATERNITY AND MENTAL CASES, AND THE NUMBER OF BEDS OCCUPIED ON 31ST DECEMBER, 1937.

Classification of Wards.	Number of Wards.	BEDS.							
		MEN.		WOMEN.		CHILDREN. (Under 16).		Total.	
		Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.
Medical	8	52	53	82	83	—	—	134	136
Surgical	8	101	93	88	90	—	—	189	183
Chronic	16	202	199	351	351	—	—	553	550
Children	6	—	—	—	—	139	147	139	147
Tuberculosis	2	16	17	17	18	—	—	33	35
Isolation	—	—	—	—	—	16	15	16	15
Maternity block ..	—	—	—	79	72	—	—	79	72
Mental—									
(a) Shortstay ..	2	10	3	10	1	—	—	20	4
(b) Long stay ..	7	3	3	14	14	—	—	17	17
Mental defectives ..		6	6	2	2	—	—	8	8
Other mental cases ..		25	23	71	71	2	2	98	96
Total	49*	415	397	714	702	157	164	1,286	1,263

* Plus maternity block.

Not included in above table :—

79 cots for maternity infants Occupied 31st December, 52.

Extent of provision for Out-Patients.

Nature and scope of the out-patient provision for continuation of treatment, emergency treatment, consultations or otherwise.	Ophthalmic, electrical department, massage, X-ray, casualties, psychiatric, orthopaedic, tonsils, dental, fracture and ante-natal.
Total number of persons seen in the out-patient department ..	5,714 (excluding ante-natal cases).
Number of these persons who were subsequently admitted for in-patient treatment in the Institution	503 do. do.
Number of these persons who had received in-patient treatment in the Institution	618
Total number of attendances in the out-patient department ..	25,782 do. do.
Ante-natal clinic {	
Number of women seen	2,200
Total number of attendances	13,015

Edgbury Convalescent Home.

ACCOMMODATION FOR THE SICK AND THE NUMBER OF BEDS OCCUPIED ON
31ST DECEMBER, 1937.

Classification of Wards.	Number of Wards.	BEDS.							
		MEN.		WOMEN.		CHILDREN. (Under 16).		Total.	
		Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.
Medical	9	—	—	84	68	—	—	84	68
Children	1	—	—	—	—	16	15	16	15
Total	10	—	—	84	68	16	15	100	83

Middlesex Country Hospital, Harefield Place.

ACCOMMODATION FOR THE SICK, AND THE NUMBER OF BEDS OCCUPIED ON 31ST DECEMBER, 1937.

Classification of Wards.	Number of Wards.	BEDS.							
		MEN.		WOMEN.		CHILDREN. (Under 16).		Total.	
		Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.
Medical	11	—	—	48	26	15	11	63	38
Surgical		—	—	—	—	—	—	—	—
Total	11	—	—	48	26	15	11	63	38

Edmonton House.

ACCOMMODATION FOR THE SICK AND THE NUMBER OF BEDS OCCUPIED ON
31ST DECEMBER, 1937.

Classification of Wards.	Number of Wards.	BEDS.							
		MEN.		WOMEN.		CHILDREN. (Under 16).		Total.	
		Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.
Chronic sick	9	70	70	119	119	—	—	189	189
Children	2	—	—	—	—	25	18	25	18
TOTAL	11	70	70	119	119	25	18	214	207

Enfield House.

ACCOMMODATION FOR THE SICK AND THE NUMBER OF BEDS OCCUPIED ON
31ST DECEMBER, 1937.

Classification of Wards.	Number of Wards.	BEDS.							
		MEN.		WOMEN.		CHILDREN. (Under 16).		Total.	
		Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.
Chronic sick	10	40	40	72	72	—	—	112	112

Chase Farm.

ACCOMMODATION FOR THE SICK AND THE NUMBER OF BEDS OCCUPIED ON
31ST DECEMBER, 1937.

Classification of Wards.	Number of Wards.	BEDS.							
		MEN.		WOMEN.		CHILDREN. (Under 16).		Total.	
		Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.
Chronic sick	7	—	—	66	57	—	—	66	57

Redhill Institution.

ACCOMMODATION FOR THE SICK AND THE NUMBER OF BEDS OCCUPIED
ON 31ST DECEMBER, 1937.

Classification of Wards.	Number of Wards.	BEDS.							
		MEN.		WOMEN.		CHILDREN. (Under 16).		Total.	
		Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.
Chronic sick	—	51	45	84	80	—	—	135	125
Tuberculosis	—	—	2	—	2	—	—	—	4
Total	—	51	47	84	82	—	—	135	129

Hillingdon Institution.

ACCOMMODATION FOR THE SICK, MATERNITY AND MENTAL CASES, AND THE NUMBER OF BEDS OCCUPIED ON 31ST DECEMBER, 1937.

Classification of Wards.	Number of Wards.	BEDS.							
		MEN.		WOMEN.		CHILDREN. (Under 16).		Total.	
		Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.
Medical	—	—	7	—	8	—	10	—	25
Surgical	—	—	—	—	6	—	2	—	8
Chronic sick	2	54	46	55	42	—	—	109	88
Maternity	—	—	—	—	6	—	—	—	6
Mental defectives	—	—	—	—	—	—	2	—	2
Other	—	—	7	—	4	—	6	—	17
TOTAL	2	54	60	55	66	—	20	109	146*

* This number is in excess of beds provided owing to extra beds crowded into sick wards.

Staines Institution.

ACCOMMODATION FOR THE SICK, MATERNITY AND MENTAL CASES, AND THE NUMBER OF BEDS OCCUPIED ON 31ST DECEMBER, 1937.

Classification of Wards.	Number of Wards.	BEDS.							
		MEN.		WOMEN.		CHILDREN (Under 16).		Total.	
		Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.	Pro- vided.	Occu- pied.
Medical	2	6	6	6	6	—	—	12	12
Surgical	2	4	3	5	5	—	—	9	8
Chronic sick	9	57	52	43	42	—	—	100	94
Children	1	—	—	—	—	11	11	11	11
Maternity	2	—	—	5	1	—	—	5	1
Mental defectives	1	—	—	1	1	—	—	1	1
Other	1	1	1	—	—	—	—	1	1
Total	18	68	62	60	55	11	11	139	128

General Hospitals.

STATISTICS RELATING TO IN-PATIENTS DEALT WITH AT THE COUNTY HOSPITALS AND INSTITUTIONS DURING THE YEAR ENDED 31ST DECEMBER, 1937.

	North Middlesex County Hospital.	Redhill County Hospital.	Central Middlesex County Hospital.	Hillingdon County Hospital.	West Middlesex County Hospital.	Edgbury Con- valescent Home.	Middlesex County Hospital, Harefield Place.	Edmonton House.	Enfield House.	Chase Farm. Cases transferred from County Hospitals and Institutions.	Redhill Institu- tion.	Hillingdon Institu- tion.	Staines Institu- tion.
Total number of admissions (in- cluding infants born in hospital)	16,180	4,960	8,898	4,393	11,979	608	754	579	138	35	1,067	1,910	338
Number of women confined in hospital	1,860	545	720	567	1,832	—	—	—	—	—	—	—	69
Number of live births	1,790	522	698	542	1,793	—	—	—	—	—	—	—	68
Number of still births	97	31	39	31	69	—	—	—	—	—	—	—	1
Number of deaths among the newly-born (i.e., under four weeks of age) (a)	74	13	23	19	31	—	—	—	—	—	—	—	2
Total number of deaths among children under one year	180	36	126	78	108	1	—	2	—	—	—	6	3
Number of maternal deaths among women admitted to hospital for confinement	17	3	1	2	7	—	—	—	—	—	—	—	—
Total number of deaths	2,115	240	1,135	295	1,474	4	1	115	27	10	460	308	55
Number of discharges (including infants born in hospital)	13,967	4,699	7,790	4,096	10,478	556	745	493	111	3	601	1,610	283
Duration of stay of patients— (i) under four weeks	13,216	4,597	7,104	3,950	8,947	150	608	213	66	—	642	1,712	245
(ii) four and under thirteen weeks	2,352	302	1,406	407	2,309	396	133	197	24	—	336	157	47
(iii) thirteen weeks or more	514	40	415	34	696	14	5	198	48	13	83	49	46
Number of beds occupied— (i) Average during the year	992.5	194.9	766	162.1	1,229	64	54	214	111	60	127	149.3	123
(ii) Highest	1,080 (b)	202	847	187 (b)	1,297 (b)	100	62	216 (b)	112	66	135	179 (b)	136
(iii) Lowest	913	168	684	127	1,173	33	34	175	108	35	117	123	110
Number of surgical operations under general anaesthetic (ex- cluding dental operations)	3,741	2,243	1,315	1,657	4,056	—	—	—	—	—	—	7	—
Number of abdominal sections	1,204	545	609	324	1,464	—	—	—	—	—	—	—	—

(a) Relating only to children born in hospital.

(b) This high figure is due to extra beds being crowded into wards.

STATISTICS RELATING TO IN-PATIENTS DEALT WITH IN THE MATERNITY DEPARTMENTS OF THE COUNTY
HOSPITALS AND INSTITUTIONS DURING THE YEAR ENDED 31ST DECEMBER, 1937.

	North Middlesex County Hospital.	Redhill County Hospital.	Central Middlesex County Hospital.	Hillingdon County Hospital.	West Middlesex County Hospital.	Staines Institu- tion.
1. Number of beds	90	21	28	12	79	5
2. Number of cases admitted during the year	1,907	545	755	571	2,113	69
3. Average duration of stay (in days)	15	13	12	10	14	13
4. Number of women delivered by—						
(a) Midwives	1,736	435	663	523	1,650	68
(b) Doctors	124	110	57	44	182	1
5. Number of cases in which medical assistance was sought by a midwife ..	834	104	20	177	703	1
6. Number of cases notified as—						
(a) Puerperal fever ..	9	4	1	1	2	—
(b) Puerperal pyrexia ..	61	9	16	19	58	—
7. Number of cases of pemphigus neonatorum	1	—	—	—	1	—
8. Number of infants not en- tirely breast-fed while in the institution	62	55	43	88	77	4
9. Number of cases notified as ophthalmia neonatorum ..	16	—	6	—	4	—
10. Number of maternal deaths..	17	3	1	2	7	—
11. Number of still-births ..	97	31	39	31	69	1
12. Number of neo-natal deaths	53	13	20	14	28	1

CLASSIFICATION OF IN-PATIENTS WHO WERE DISCHARGED FROM OR WHO DIED
31st Dec

DISEASE GROUPS.	North Middlesex County Hospital.		Redhill County Hospital.		Central Middlesex County Hospital.		Hillingdon County Hospital.	
	Children (under 16).	Men and Women.	Children (under 16).	Men and Women.	Children (under 16).	Men and Women.	Children (under 16).	Men and Women.
A. Acute infectious disease (1)	94	156	16	19	90	182	16	9
B. Influenza (2)	9	85	3	53	8	232	3	23
C. Tuberculosis—								
Pulmonary	6	266	5	23	6	166	2	92
Non-pulmonary	27	45	6	17	3	22	9	17
D. Malignant disease	4	681	1	50	—	285	—	47
E. Rheumatism—								
(a) Acute rheumatism (rheumatic fever), together with sub-acute rheumatism and chorea	61	78	15	26	21	41	18	20
(b) Non-articular manifestations of so-called “rheumatism” (muscular rheumatism, fibrositis, lumbago and sciatica)	1	29	—	19	19	57	—	10
(c) Chronic arthritis	—	125	—	14	—	95	—	4
F. Venereal disease	—	37	—	10	1	56	4	14
G. Puerperal pyrexia	—	44	—	9	—	16	—	20
H. Puerperal fever—								
(a) Women confined in the hospital	—	3	—	4	—	—	—	1
(b) Other cases	—	—	—	3	—	1	—	1
I. Other diseases and accidents connected with pregnancy and childbirth	1	795	—	642	30	399	—	253
J. Mental diseases—								
(a) Senile dementia	—	12	—	—	—	12	—	—
(b) Other	10	495	—	13	6	522	—	1
K. Senile decay (3)	—	85	—	—	—	196	—	—
L. Accidental injury and violence (4)	285	891	159	454	135	545	135	261
<i>In respect of cases not included above :</i>								
M. Disease of the nervous system and sense organs ...	325	354	178	94	153	130	120	56
N. Disease of the respiratory system	387	636	127	145	238	434	136	161
O. “ circulatory system	21	1,306	8	63	8	492	6	87
P. “ digestive system	772	1,844	448	692	372	1,087	602	474
Q. “ genito-urinary system	113	711	121	169	42	397	39	243
R. “ skin	122	241	28	20	138	261	16	26
S. Other diseases... ..	237	673	141	221	94	314	132	197
T. Mothers and infants discharged from maternity wards and not included in above figures :—								
(a) Mothers	—	1,830	—	314	—	755	—	546
(b) Infants	1,747	—	509	—	864	—	523	—
U. Any persons not falling under any of the above headings	96	342	56	44	—	—	65	2
Total	4,318	11,764	1,821	3,118	2,228	6,697	1,826	2,565

(1) Including—with the exception of acute primary and influenzal pneumonia, tuberculosis, puerperal pyrexia and puerperal fever—all generally notifiable diseases, together with measles, German measles, chickenpox, whooping cough and mumps. Cases of influenzal pneumonia, tuberculosis, puerperal pyrexia, puerperal fever and acute primary pneumonia are recorded respectively under Groups B, C, G, H and N. Cases of encephalitis lethargica are entered under Group A if acute and under Group M if chronic.

(2) Including acute influenzal pneumonia.

(3) Confined to cases and deaths in which no more specific diagnosis was practicable.

(4) Including suicides, attempted suicides and poisoning cases.

IN THE COUNTY HOSPITALS AND INSTITUTIONS DURING THE YEAR ENDED
EMBER, 1937.

West Middlesex County Hospital.		Edgbury Con- valescent Home.		Middlesex County Hospital, Harefield Place.		Edmonton House.		Enfield House.		Chase Farm		Redhill Institu- tion.		Hillingdon Institu- tion.		Staines Institu- tion.	
Children (under 16).	Men and Women.	Children (under 16).	Women.	Children (under 16).	Women.	Children (under 16).	Men and Women.	Children (under 16).	Men and Women.	Cases transferred from County Hos- pitals & Institutions.		Children (under 16).	Men and Women.	Children (under 16).	Men and Women.	Children (under 16).	Men and Women.
										Children.	Women.						
95	70	2	1	6	1	—	1	—	—	—	—	—	—	30	55	1	—
3	49	2	7	1	23	—	20	—	25	—	—	—	26	1	42	6	7
5	166	—	—	—	2	—	—	—	—	—	—	—	72	1	8	—	—
15	23	14	10	2	4	—	—	—	—	—	—	1	5	—	2	—	—
—	294	—	5	—	—	—	10	—	13	—	3	—	87	—	88	—	1
10	26	6	19	8	11	—	—	—	4	—	1	—	4	2	11	2	—
1	23	—	—	7	13	—	—	—	4	—	—	—	11	—	3	—	—
—	66	—	33	—	1	—	6	—	—	—	—	—	27	—	14	—	—
—	11	—	—	—	—	—	—	—	—	—	—	—	2	—	5	—	—
—	26	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	22	—	—	—	3	—	—	—	—	—	—	—	—	—	—	—	—
—	301	—	33	—	179	—	—	—	—	—	—	—	9	—	351	2	1
—	366	—	1	—	—	—	3	—	4	—	—	—	—	—	1	—	2
8	—	1	—	—	—	—	—	—	—	—	—	1	47	1	41	—	3
—	—	—	3	—	—	—	31	—	3	—	2	—	111	—	—	—	6
94	492	3	24	3	26	—	—	—	4	—	—	—	70	9	114	—	1
165	298	13	55	—	—	—	89	—	12	—	—	—	180	17	138	1	12
534	778	36	68	44	85	—	92	—	13	—	—	—	129	26	135	2	27
52	894	4	47	2	24	—	63	—	26	—	7	—	136	—	257	1	32
260	1,168	7	52	—	8	—	18	—	15	—	—	—	52	9	96	5	4
36	551	5	21	9	12	—	—	—	5	—	—	—	39	—	54	—	2
149	328	10	10	5	6	—	5	—	6	—	—	—	21	56	26	4	8
174	322	22	24	78	137	2	42	—	2	—	—	—	23	9	89	9	12
—	2,116	—	—	—	15	—	—	—	—	—	—	—	—	—	—	—	66
1,765	—	22	—	30	—	—	—	—	—	—	—	—	—	—	—	63	—
194	—	—	—	—	—	226	—	—	2	—	—	—	8	208	19	36	22
3,560	8,392	147	413	195	551	228	380	—	138	—	13	2	1,059	369	1,549	132	206

Domiciliary Medical Services.

In my annual report for 1934, I set out the conditions of appointment of medical practitioners employed by the County Council as district medical officers.

Revision of salaries, which is carried out each year, resulted in 21 district medical officers receiving increases totalling £1,150 per annum, and decreases amounting to £75 per annum were made in two cases as from 1st April, 1937.

The County is divided into 60 medical relief districts, each in charge of a district medical officer.

During 1937, 32,474 visits were made to patients in their homes by district medical officers, and 48,841 attendances were made by patients at the doctors' surgeries for advice and treatment.

Many persons who receive domiciliary medical attendance from district medical officers are also in need of nursing attention without which they might require admission to a hospital or an institution. Various district nursing associations in the County provide this attention and the County Council recognise the value of this work by the payment of annual grants, based on a return of work furnished by each association, and calculated on the number of visits paid to persons in receipt of relief. The total number of associations to whom grants were made during the financial year 1937-38 was 37, and the total amount paid was £2,366.

Since the appropriation of the County general hospitals under the Public Health Acts, a large number of persons requiring dental treatment, surgical appliances, etc., are dealt with through the out-patient departments of the hospitals. In addition to these cases, the Council supplied to persons in receipt of out-relief surgical instruments, *e.g.*, artificial limbs, splints, trusses, etc., in 355 instances, dental treatment in 177, and special forms of medical treatment, *e.g.*, insulin, etc., in 40.

Institutional Provision for Mental Defectives.

I am indebted to Dr. E. Laval, Medical Officer under the Mental Deficiency Acts, for the following information as to the extent of the institutional provision made by the County Council, as at 31st December, 1937 :—

Institutions provided for mental defectives by the Middlesex Local Authority—

Middlesex Colony, Shenley, certified institution	..	..	..	854
Craufurd Home certified institution	..	..	..	120
Bramley House certified institution	..	..	..	66
			—	1,040 beds.

Cases maintained by the Mental Deficiency Committee in other certified institutions in various parts of the country	567
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Treatment of Cancer.

The arrangements for the treatment of cancer outlined in my report for 1935 were continued during 1937 and in all a total of 1,482 patients was dealt with. Of these, 685 were treated at the North Middlesex County Hospital, of whom 93 were transferred from the wards of the other County Council general hospitals and institutions and 2 were referred from out-patient departments.

The Ministry of Health ask for a classified return of the cases of cancer dealt with by local authorities, and the following table shows the number of patients and the site of the malignant condition grouped under the several headings required by the Ministry :—

Uterus	..	..	..	..	..	..	..	196
Tongue and mouth	..	..	..	..	..	..	..	64
Breast	..	..	..	..	..	..	..	159
Lip	..	..	..	..	..	..	..	13
Skin	..	..	..	..	..	..	..	48
Larynx	..	..	..	..	..	..	..	10
Bladder	..	..	..	..	..	..	..	48
Rectum	..	..	..	..	..	..	..	117
Other sites	..	..	..	..	..	..	..	827
							—	1,482

Included in the above total are 181 cases of advanced disease accommodated in the County Council's institutions not appropriated under the Public Health Acts. These patients were under the supervision of the medical staffs of the adjoining County hospitals, but, with the exception of palliative measures, no active treatment was indicated.

Details of the results of treatment of cases referred to the special radiation department of the North Middlesex County Hospital will be found in the Medical Superintendent's Report (Appendix I).

Welfare of the Blind.

The examination and certification of applicants for admission to the County Register of Blind Persons has continued during 1937 on the lines described in previous reports.

Eighteen examination sessions were held at the ophthalmic clinic in the offices of the Public Health Department, at 10, Great George Street, Westminster, and 322 persons presented themselves for examination, of whom 48 were re-examinations.

As in previous years the ophthalmic surgeons also visited in their own homes persons thought to be blind but who, by reason of age or infirmity, were unable to attend the central clinic. In all, 58 persons were examined either in institutions, hospitals, school clinics, or their own homes, one home case being a re-examination. Of the 380 persons examined, 248 were found to be blind within the meaning of the Blind Persons Act, 1920.

Particulars relating to blind persons ordinarily resident in Middlesex have been furnished by the Secretary of the Middlesex Association for the Blind, a voluntary body which largely administers the Act on behalf of the County Council. The figures relate to the financial year ended 31st March, 1938.

On 31st March, 1938, there were 2,095 individuals on the Middlesex County register of blind persons, an increase of 104 as compared with the position on 31st March, 1937. The age-distribution of the 2,095 persons referred to is set out below, whilst the corresponding figures for 31st March, 1937, are shown in brackets.

Age.									Number.
0 to 5	..	..	..	..	..	..	..	..	4 (3)
5 „ 16	..	..	..	..	..	..	..	..	48 (50)
16 „ 21	..	..	..	..	..	..	..	..	43 (38)
21 „ 40	..	..	..	..	..	..	..	..	273 (269)
40 „ 50	..	..	..	..	..	..	..	..	286 (267)
50 „ 70	..	..	..	..	..	..	..	..	748 (717)
Over 70	..	..	..	..	..	..	..	..	693 (646)
Unknown	..	..	..	..	..	..	..	..	— (1)

So far as the County of Middlesex is concerned blindness is very largely an affliction of middle-aged or elderly people. Of the total number on the register, over two-thirds are persons above the age of 50 and one-third are over 70 years of age.

The following table affords information as to the extent to which blind persons resident in the County are able to follow useful occupations; whilst it is satisfactory to note that only 9 persons who have received training are unemployed, the tremendous preponderance of unemployable persons is to be regretted. In view, however, of the age-distribution of blindness this circumstance is not altogether surprising.

—					31st March, 1936.	31st March, 1937.	31st March, 1938.
Babies under 5	..	..	..	..	3	3	4
Children of school age (5 to 16)	..	..	..	..	59	50	48
Persons under training	..	..	..	..	41	52	54
Persons apparently trainable who refuse training or are awaiting vacancies	..	..	..	..	14	12	8
Employed—							
Workshops	..	..	..	..	83	88	100
Home workers	..	..	..	..	115	115	99
Elsewhere	..	..	..	..	176	173	183
					374	376	382
Trained unemployed	..	..	..	..	5	9	9
Unemployable	..	..	..	..	1,363	1,489	1,590
Totals	..	..	..	..	1,859	1,991	2,095

The number of unemployable blind shows an increase of over 100. The life of these unfortunate individuals in many cases can be rendered happier by the provision of instruction in one or other of the embossed types used by the blind, or in the technique of some simple pastime occupation. Work of this nature is carried out by the home teachers employed by the Middlesex Association for the Blind, and towards the cost of this service and for the other expenses of the Association the County Council contributes an amount of approximately £5,000 a year.

In its scheme of administrative arrangements for discharging the functions transferred to the Council under Part I of the Local Government Act, 1929, the County Council made a declaration to the effect that "all domiciliary assistance to blind persons shall be provided exclusively by virtue of the Blind Persons Act, 1920, and not by way of poor relief."

During the year ended 31st March, 1938, the County Council's grants towards the cost of surgical appliances, dentures, &c., amounted to £309 12s. 5d., and 1,117 blind persons were afforded domiciliary assistance at a cost to the Council of £43,819 12s. 10d.

Voluntary Hospitals.

Information with regard to the extent and nature of the work carried out in the voluntary hospitals in Middlesex was detailed at some length in my Annual Report for 1933.

No alteration in the basis upon which the County Council makes grants to certain voluntary general and special hospitals, both within and outside the boundaries of the County, was made during 1937 and for the financial year 1937-38 a total of £425 5s. 0d. was contributed by way of grants to 33 hospitals.

Maternity and Child Welfare.

ADMINISTRATION OF MIDWIVES ACTS, 1902-1936.

Area.—At the close of 1937, the County Council was the local supervising authority for the whole of the county with the exception of the Boroughs of Ealing, Edmonton, Hendon, Heston and Isleworth, Tottenham, Twickenham and Willesden, and the Urban Districts of Enfield and Harrow. The area supervised by the County Council has been considerably reduced owing to the fact that during the year the Minister of Health granted the applications of four large boroughs and urban districts (namely, the boroughs of Hendon, Heston and Isleworth and Twickenham, and the Urban District of Enfield) to be constituted local supervising authorities. Similar applications from seven other welfare councils were declined by the Minister, although the County Council had expressed the opinion that it was desirable for all welfare authorities in the County to be constituted local supervising authorities under the Midwives Acts.

Domiciliary service of midwives.—Difficulty arose in formulating proposals for a domiciliary service of midwives as required by the Midwives Act, 1936, for it was not until 6th August, 1937, that the Minister's decision upon the last of the applications made by welfare authorities was promulgated, and it was not until this month, therefore, that the area for which the County Council would be responsible was finally settled.

The outlines of a scheme were approved by the Council in January and following this, and in accordance with Section 1 (2) of the Act, consultations were held with representatives of the voluntary associations employing, or willing to employ domiciliary midwives, the Metropolitan Counties Branch of the British Medical Association, the West Middlesex Branch of the Midwives Institute and the Welfare Councils. The completed scheme was submitted to the Ministry of Health on 31st March, and came into operation in the Council's Maternity and Child Welfare area on 1st October, 1937.

The Act provides that a county council may secure a whole-time salaried service of midwives in one of three ways or by a combination thereof:—

- (1) By itself appointing whole-time salaried midwives ;
- (2) By arranging with local authorities, who are welfare councils, to appoint whole-time salaried midwives on its behalf ;
- (3) By entering into arrangements with voluntary organisations to undertake domiciliary midwifery on behalf of the County Council.

The Council has utilised each of these three methods in various areas of the County.

(1) In those county districts for which the Council is the Maternity and Child Welfare authority and which are not adequately served by a voluntary association, whole-time salaried midwives have been appointed. On 1st October, 15 such midwives began duty and by the close of the year 20 midwives were at work, as indicated in the following table :—

County District.	Midwives employed		Total No. required in accordance with scheme.
	on 1st October.	at close of 1937.	
Feltham	2	3	4
Friern Barnet	2	2	2
Hayes and Harlington	4	4	5
Ruislip-Northwood	1	2	2
Staines	1	1	1
Sunbury	1	2	2
Uxbridge	2	3	4
Yiewsley and West Drayton	2	3	4

(2) In four county districts, as indicated below, arrangements have been made with the welfare councils to employ midwives on behalf of the County Council.

County District.	Midwives employed. at close of 1937.	Total No. required in accordance with scheme.
Finchley	2	2
Hornsey	3	5
Southall	5	5
Wood Green	4	4

(3) The circular issued by the Ministry of Health, stressed the importance of co-operation with local voluntary organisations. Accordingly, arrangements have been made with the undermentioned nursing associations to provide the service in the districts in which they were working at the passing of the Act. Five of these associations operate in the area for which the County Council is the maternity and child welfare authority, and four in the areas of the following welfare councils :—Acton, Brentford and Chiswick, Southgate and Wembley.

Voluntary Organisation.	Area served.	Midwives employed at close of 1937.
South Mimms, Potters Bar and Bentley Heath Nursing Association	Potters Bar U.D.	2
Staines and Laleham Nurse Society	Staines and Laleham Wards of Staines U.D.	2
Stanwell District Nursing Association	Stanwell Ward of Staines U.D. ..	1
Ashford District Nursing Association	Ashford Ward of Staines U.D. ..	1
Shepperton and Littleton District Nursing Association	Parishes of Shepperton and Littleton, Sunbury U.D.	1
Queen Charlotte's Hospital	Boroughs of Acton and Brentford and Chiswick.	6
Southgate Queen's Nursing Association	Southgate Borough	2
Kingsbury District Nursing Association	Wembley U.D.	2
Wembley District Nursing Association	Wembley U.D.	3

The terms of employment of the midwives, whether officers of the County Council, a welfare council or a voluntary association are as follows :—

- (i) A midwife who is also a state registered nurse receives a salary of £200, increasing by annual sums of £10 to a maximum of £300 per annum.
- (ii) A midwife who is not a state registered nurse, receives a salary of £180, increasing by annual sums of £10 to a maximum of £250 per annum.
- (iii) A midwife who holds the Midwife-teachers Certificate of the Central Midwives Board is paid an additional sum of £25 annually.

Rules of the Central Midwives Board.—The rule of the Central Midwives Board, whereby the minimum period during which a midwife is required to continue in attendance upon her patients is raised from ten to fourteen days, came into force on 1st January, 1937. In a few cases patients have resented the extra attendances, but generally the lengthening of the period of "lying-in" has been welcomed and midwives have found no difficulty in carrying out the rule.

Notification of Intending to Practise.—During 1937, notification of intention to practise midwifery, either temporarily or regularly, in the area for which the County Council is responsible, was received by the County Council from 417 midwives residing in the districts of the County as shown in the following table :—

Boroughs and Urban Districts.	Total Number of Midwives practising during 1937.	Removed from District during 1937.	Certificate surrendered under Midwives Act, 1936, during 1937.	Practising Temporarily during 1937.	Number in District end of 1937.
Acton (Borough)	15	6	—	3	6
Brentford and Chiswick (Borough)	14	1	1	—	12
*Enfield	15	—	—	—	—
Feltham	9	1	2	1	5
Finchley (Borough) ..	8	—	—	—	8
Friern Barnet	4	—	1	—	3
†Hampton	2	—	—	—	—
†Hampton Wick	1	—	—	—	—
Hayes and Harlington ..	14	—	2	1	11
*Hendon (Borough) ..	33	—	—	—	—
*Heston and Isleworth (Borough)	32	—	—	—	—
Hornsey (Borough) ..	9	—	—	—	9
Potters Bar	2	—	—	—	2
Ruislip-Northwood ..	20	2	—	2	16
Southall (Borough) ..	17	1	1	1	14
Southgate (Borough) ..	12	1	1	—	10
Staines	12	1	3	—	8
Sunbury	5	—	—	1	4
†Teddington	2	—	—	—	—
†Twickenham (Borough) ..	11	1	—	—	—
Uxbridge	20	—	—	2	18
Wembley (Borough) ..	56	3	4	3	46
Wood Green (Borough) ..	10	1	1	—	8
Yiewsley and West Drayton	8	—	2	1	5
Totals	331	18	18	15	185
Midwives residing outside the County Council's area ..	86	3	6	14	57
Grand Totals ..	417	21	24	29	242

* On 1st April, 1937, these Districts became Local Supervising Authorities.

† On 1st October, 1937, Twickenham Borough Council became Local Supervising Authority for these areas.

Qualifications of Practising Midwives.—The qualifications held by the 417 midwives practising in the County Council's area during 1937 may be summarised as follows :—

In possession of the certificate of the Central Midwives Board	409
In possession of the certificate of the London Obstetrical Society	4
In possession of a recognised hospital certificate	1
Enrolled by reason of having been in <i>bona fide</i> practice previous to the Midwives Act, 1902, coming into operation	3
	<u>417</u>

The number (three) of *bona fide* midwives practising in the County Council's area during 1937 amounted to only 0·72 per cent. of the total. The women conducted the confinements of 81 patients, equivalent to 0·79 per cent. of all births attended by midwives, and acted as maternity nurses in 11 cases (0·20 per cent. of those in which midwives acted in that capacity).

On 31st December there were no *bona fide* midwives in the Council's area, as the three midwives concerned resided in districts of Enfield and Heston and Isleworth, the local authorities of which were constituted local supervising authorities on 1st April, 1937.

Women not certified under the Midwives Acts.—During 1937 no proceedings were instituted by the Council against women for infringements of the Midwives Acts, but in one instance a verbal caution was administered by the Council's supervisors of midwives to a woman, not certified under the Midwives Act, 1902, who attended a woman in childbirth. The evidence in this case was not sufficiently strong to warrant the institution of legal proceedings.

Number of Births attended by Midwives.—Of the number of midwives residing in the area of Middlesex supervised by the County Council, who notified their intention to practise, returns were received from 229 who had actually practised in 1937, setting out the number of cases attended by them in the capacity of midwife or maternity nurse. Medical officers of health of boroughs and urban districts in the County which also are local supervising authorities have been good enough to supply me with similar information relating to their respective districts, so that it has been possible to compile the following comprehensive table referring to the entire administrative county.

BIRTHS ATTENDED BY MIDWIVES RESIDING IN EACH BOROUGH AND URBAN DISTRICT.

Boroughs and Urban Districts.	Births attended by Midwives residing in each District.		Births at which Midwives acted as Nurses.	
	In Patients' Homes.	In Nursing Homes.	In Patients' Homes.	In Nursing Homes.
Aoton (<i>Borough</i>)	104	11	39	31
Brentford and Chiswick (<i>Borough</i>)	233	—	36	—
*Enfield	144	6	45	8
Feltham	427	22	148	11
Finchley (<i>Borough</i>)	83	5	33	28
Friern Barnet	112	—	21	—
†Hampton	133	—	44	—
†Hampton Wick	2	—	2	—
Hayes and Harlington	369	35	83	99
*Hendon (<i>Borough</i>)	96	—	59	22
*Heston and Isleworth (<i>Borough</i>)	126	7	40	23
Hornsey (<i>Borough</i>)	172	14	77	102
Potters Bar	34	—	23	—
Ruislip-Northwood	163	37	137	107
Southall (<i>Borough</i>)	310	53	43	84
Southgate (<i>Borough</i>)	71	—	55	337
Staines	300	—	126	—
Sunbury	119	—	38	—
†Teddington	96	4	16	8
†Twickenham (<i>Borough</i>)	166	6	58	45
Uxbridge	227	24	140	90
Wembley (<i>Borough</i>)	270	50	240	112
Wood Green (<i>Borough</i>)	148	50	47	118
Yiewsley and West Drayton	329	—	39	—
Attended by midwives residing outside the County Council's area	218	—	91	—
Totals	4,452	324	1,680	1,225
Ealing (<i>Borough</i>)	631	58	183	181
Edmonton (<i>Borough</i>)	681	3	141	3
‡Enfield	374	23	197	47
Harrow	872	105	444	498
‡Hendon (<i>Borough</i>)	900	—	266	40
‡Heston and Isleworth (<i>Borough</i>)	423	25	68	91
Tottenham (<i>Borough</i>)	751	2	54	1
§Twickenham (<i>Borough</i>)	66	10	23	4
Willesden (<i>Borough</i>)	600	2	251	14
Grand totals	9,750	552	3,307	2,104

* To 31st March, 1937.
† To 30th September, 1937.
§ From 1st October, 1937.
‡ From 1st April, 1937.

The total number of births in the whole County was 30,665 and 10,302 (34 per cent.) of these were attended by midwives, whilst 5,411 (18 per cent.) were attended by practising midwives in the capacity of maternity nurses.

Notifications.—The number of notifications received from midwives, in accordance with the Rules of the Central Midwives Board, together with similar figures for the previous three years, are as follows :—

Notifications.	1934.	1935.	1936.	1937.
Sending for medical assistance	1,409	1,618	1,704	1,330
Still-birth	92	97	93	59
Death of infant	60	56	78	38
Death of mother	2	3	4	1
Laying out the dead	40	31	45	25
Artificial feeding	47	68	75	48
Liability to be a source of infection	107	109	128	121
Totals	1,757	1,982	2,127	1,622

The notifications of sending for medical aid may be classified as follows :—

Medical assistance required for conditions arising—	1934.	1935.	1936.	1937.
During pregnancy	170	197	235	149
During labour	811	948	883	704
During lying-in	127	154	232	158
In infant	301	319	354	319
Totals	1,409	1,618	1,704	1,330

Maternal Deaths.—One notification related to the death of a woman while actually under the care of a midwife. The patient died before delivery during induction of anæsthesia by a doctor. To this case must be added the number of deaths of women, who, while being attended by midwives, became so seriously ill that transfer to a hospital was necessitated, where they subsequently died. Five cases of this nature occurred during the year, making a total of six deaths among women attended by midwives, or a death-rate of 1·26 per 1,000 births attended. (The maternal death-rate for all births in the administrative County during 1937 was 2·77 per 1,000.)

Enquiries were made into each case, and from these it was ascertained that the causes of death may be classified as follows :—

Obstetric shock	3
Sepsis	1
Hæmorrhage	1
Toxæmia	1
	—
	6
	—

Puerperal Fever and Puerperal Pyrexia.—(See also page 54). During the year, 9 cases of puerperal fever and 22 cases of puerperal pyrexia were notified, occurring amongst women who had been attended in their confinements by certified midwives. This total number of 31 cases represents 5·97 per cent. of the notifications in the County.

Inquiry was made into the cause of raised temperature in all cases of this condition occurring in the practices of certified midwives, and the information obtained indicates that puerperal sepsis was responsible for the rise of temperature in 22 out of the 31 cases notified. This is equivalent to an incidence rate of puerperal sepsis among midwives' cases of 4·61 per 1,000 births.

The following table records for the past five years the yearly number of notifications of puerperal fever, etc., and of deaths from puerperal sepsis, both in the County generally and in the area for which the County Council is local supervising authority under the Midwives Acts, together with similar information with regard to midwives' cases in the latter area.

PUERPERAL FEVER AND PUERPERAL PYREXIA.

Year.	Total Number of Births Registered in the County.	Total Number of Cases Notified in the County.				Total Number of deaths from Puerperal Sepsis in the County.	Number of births attended by Midwives.	Cases notified in Practices of Midwives.		Deaths from Puerperal Sepsis in Midwives' Cases.	
								Puerperal Fever.	Puerperal Pyrexia.		
	(a)	(b)	(a)	(b)	(a)	(b)	(b)	(b)	(b)	(b)	
1933 ..	24,501	16,602	110	67	314	211	36	6,049	13	33	8
1934 ..	26,376	17,929	156	112	292	190	33	5,944	13	17	5
1935 ..	27,594	19,145	135	97	294	188	32	7,052	19	26	6
1936 ..	29,110	20,583	119	84	320	222	18	5,604	17	28	2
1937 ..	30,665	*18,554	†107	‡38	‡412	‡160	*14	*4,776	†9	‡22	1

(a) The County ; (b) Area for which the County Council is the Local Supervising Authority under the Midwives Acts.

* These figures include those for the districts of Enfield, Hendon, Heston and Isleworth and Twickenham for the whole year, although the first three became Local Supervising Authorities under the Midwives Acts from 1st April, 1937, and the Borough of Twickenham from 1st October, 1937.
† This figure relates to the period of 39 weeks ending 2nd October, 1937.

‡ This figure includes cases for the fourth quarter of 1937 which would have been notified as puerperal fever in accordance with the Public Health (Notification of Puerperal Fever and Puerperal Pyrexia) Regulations, 1926.

In view of the serious consequences which may follow if satisfactory treatment is not promptly instituted, all cases of pathological conditions of the eyes occurring in new-born infants are very closely followed up, with a view to ensuring that adequate treatment is obtained and to ascertaining whether visual impairment has resulted. During 1937, no apparent injury to vision resulted in any instance.

Visits to midwives who had notified their intention to practise	..	..	..	..	760
„ midwives who had not notified „ „ „	..	..	..	..	3
„ women not certified under the Midwives Act	..	..	..	..	1
„ patients' homes in connection with cases of ophthalmia, &c.	..	..	..	..	25
„ other persons in connection with investigations under the Midwives Acts, etc.					72
„ premises in connection with the registration of nursing homes	..	..	..	..	295
„ ante-natal clinics and welfare centres	..	..	..	..	98
„ children's homes (public assistance)	..	..	..	..	15
„ homes of foster mothers in connection with child life protection	..	..	..	..	23
Total	..	..	..	..	1,292

In addition to the scheme organized by the London County Council, short courses of post-certificate instruction were arranged and conducted in Middlesex by the obstetrical staff at the North Middlesex, West Middlesex, Redhill and Central Middlesex County Hospitals. Each course consisted of four demonstrations, and sixty-one midwives attended. The number permitted to enter for each course was limited in order to allow of individual instruction being given, and the midwives appeared greatly to appreciate not only the instruction given but also the opportunity of visiting the hospitals to which cases with which they had been personally concerned were admitted when institutional treatment was required.

In the case of inflammation of, or discharge from, infants' eyes, this right of recovery has been waived by the County Council, in accordance with the suggestion of the Ministry of Health, in order that there may be no temptation for midwives to delay calling in a doctor in cases of apparently trivial affection of the eyes.

FEES PAID TO MEDICAL PRACTITIONERS UNDER SECTION 14 OF THE MIDWIVES ACT, 1918.

FEES PAID TO MEDICAL PROFESSION AND PATIENTS											
Year.	A. Number of notifications of sending for Medical Aid.	B. Number of Claims for Fees received.	Percentage of B. to A.	C. Total amount due to Doctors in respect of cases attended by them during <u>financial</u> year.			D. Income from Patients in respect of Doctors' fees.				
					£	s.	d.		£	s.	d.
1934 ...	1,409	909	63·8	1934-35	1,387	5	0	1934-35	518	2	3
1935 ...	1,618	1,041	64·3	1935-36	1,436	12	0	1935-36	567	19	1
1936 ...	1,704	1,191	69·9	1936-37	1,532	9	6	1936-37	608	1	0
1937 ...	1,330	969	72·9	1937-38	1,120	19	0	1937-38	505	18	0

Compensation to Midwives Temporarily Suspended from Practice.—Section 2 (i) of the Midwives Act, 1926, states that where a midwife has been suspended from practice in order to prevent the spread of infection, she shall, if she is not herself in default, be entitled to recover from the local supervising authority such amount by way of compensation for loss of practice as is reasonable in the circumstances of the cases. Since the inauguration of the domiciliary service of midwives on 1st October, claims for compensation have been received only from midwives in independent practice, as the Council's salaried midwives do not suffer any pecuniary loss when suspended from practice, and the sum paid by way of compensation is, therefore, considerably less in 1937 than it has been in previous years.

During the year, thirteen such claims were made by midwives who had been suspended from, or restricted in their practice. The claims were considered by the Maternity and Child Welfare Committee and were deemed reasonable in view of the circumstances of the cases, and sums amounting to £33 were paid by way of compensation.

Owing to the importance of the hæmolytic streptococcus in the causation of puerperal sepsis, no midwife who was known to have been in contact with a case of streptococcal infection was allowed to resume work until nose and throat swabs negative for Group A streptococci were obtained.

NURSING HOMES.

The County Council is the authority for the registration of nursing homes in the whole of the County with the exception of the Boroughs of Ealing, Edmonton, Hendon, Heston and Isleworth, Tottenham, Twickenham and Willesden and the Urban Districts of Enfield and Harrow. In those districts the administration has been delegated by the County Council to the local authorities in view of the fact that the supervision of midwives is carried out by the local councils. Delegation to Enfield, Hendon, and Heston and Isleworth, took place on 1st April, 1937, and to Twickenham on 1st October, 1937.

At the beginning of the year, particulars of 127 nursing homes appeared on the County Council's register. During 1937, applications for registration were received in respect of a further 13 homes. All of these homes were inspected by Dr. Back, Assistant County Medical Officer, accompanied by Miss Coleman, Supervisor of Midwives. In addition, premises were inspected in connection with one further application which had been received towards the close of the previous year.

The table on page 39 gives particulars of the action taken by the Council in regard to the applications, also information as to homes removed from the register, and the number of homes appearing on the register at the beginning and end of the year respectively.

The following table shows the number of registered nursing homes in each borough and urban district for which the County Council is the authority for the supervision of nursing homes. The figures in brackets indicate the number of homes devoted, either wholly or in part, to the reception of maternity cases.

Boroughs and Urban Districts.	Number of Nursing Homes on Register at end of 1937.	Approved accommoda- tion (beds) at end of 1937.
Acton (<i>Borough</i>)	7 (3)	23
Brentford and Chiswick (<i>Borough</i>).. ..	6 (4)	51
Feltham	2 (1)	11
Finchley (<i>Borough</i>)	13 (5)	85
Friern Barnet	2 (2)	3
Hayes and Harlington	2 (2)	15
Hornsey (<i>Borough</i>)	22 (12)	232
Potters Bar	— (—)	—
Ruislip-Northwood	5 (3)	19
Southall (<i>Borough</i>)	2 (2)	19
Southgate (<i>Borough</i>)	6 (5)	55
Staines	2 (1)	25
Sunbury	2 (—)	29
Uxbridge	3 (1)	29
Wembley (<i>Borough</i>).. .. .	8 (7)	39
Wood Green (<i>Borough</i>)	2 (1)	13
Yiewsley and West Drayton	— (—)	—
Totals	84 (49)	648

NURSING HOMES.

Year.	On register at beginning of year.		Applica- tions received.	Applica- tions voluntarily withdrawn.	Registra- tions refused.	Registra- tions granted.	Applica- tions held over or postponed.	Removed from register on account of death or removal, or voluntarily.	Registra- tion cancelled.	Supervision of homes transferred to local Councils.	On register at close of year.	
	Number of homes.	Approved accommo- dation (beds).									Number.	Accommo- dation (beds).
1933 ..	146	918	31	3	—	28	2	20	—	—	154	1,011
1934 ..	154	1,011	25	2	—	21	4	19	—	—	156	1,088
1935 ..	156	1,088	18	3	2	14	3	21	—	—	149	1,076
1936 ..	149	1,076	26	1	—	27	1	24	1	24	127	917
1937 ..	127	917	13	—	—	12	2	13	—	42	84	648

An enquiry was made as to the number of births which occurred during 1937 in nursing homes in the County. In addition to information obtained directly from proprietors of nursing homes registered by the County Council, the following table contains similar particulars with regard to nursing homes in Ealing, Edmonton, Enfield, Harrow, Hendon, Heston and Isleworth, Tottenham, Twickenham and Willesden, which have been kindly supplied by the respective medical officers of health, and thus furnishes a comprehensive figure for the whole administrative County.

BIRTHS OCCURRING IN NURSING HOMES DURING 1937.

Attended by.	County Council's Area.	Ealing.	Edmonton.	Enfield.	Harrow.	Hendon.	Heston & Isleworth.	Tottenham.	Twickenham.	Willesden.	Administrative County.
(a) Doctors ..	1,505	219	3	47	656	231	91	—	28	14	2,794
(b) State certified midwives, no doctor being in attendance.. ..	303	58	3	23	105	—	25	2	10	2	531
Totals ..	1,808	277	6	70	761	231	116	2	38	16	3,325

MATERNITY AND CHILD WELFARE SCHEME.

The County Council is the authority for maternity and child welfare in 9 of the 26 districts included in the administrative County, viz., the Urban Districts of Feltham, Friern Barnet, Hayes and Harlington, Potters Bar, Ruislip-Northwood, Staines, Sunbury, Uxbridge, and Yiewsley and West Drayton.

The Urban District of Hampton Wick, previously administered by the County Council, was incorporated in the Borough of Twickenham on 1st April, 1937, thereby reducing by 1,306 acres the area for which the County Council is the welfare authority.

The following is a summary of certain statistics relating to the maternity and child welfare area of the County Council :—

Area	†53,535 acres
Population (estimated by Registrar General)	†244,985
Live-births	†4,639
Birth-rate	18·9
Number of infant deaths	247
Infantile mortality rate, per 1,000 live-births	53·2
Number of maternal deaths	9
Maternal mortality rate, per 1,000 live-births	1·94
Number of cases of puerperal fever.. .. .	7
„ puerperal pyrexia	43
„ ophthalmia neonatorum	18

† Not including Hampton Wick.

Although the extent of the area for which the County Council is the authority for Maternity and Child Welfare has been reduced, the population has increased by nearly 20,000. On account of this increase it has been necessary to increase the Council's staff by the addition of two assistant medical officers, four health visitors and school nurses, two assistant dental officers and two dental attendants. Since September, 1937, the staffing of all its welfare centres has been carried out by means of whole-time officers of the Council.

The establishment of additional clinics and welfare sessions during 1937 made it advisable to increase the health visiting staff, in order that sufficient time might be devoted to visiting in the home. At the close of 1936, home visiting was being carried out in respect of 3,595 infants under the age of one year and 8,030 children between the ages of one and five. A large proportion of the infants, but only about one-fifth of the children between one and five, attend the welfare centres, and regular visits to the homes of the latter are, therefore, especially necessary for the detection of early defects, and the instruction of their mothers in suitable methods of child nurture and hygiene.

Mention has been made in a previous Annual Report of the recent policy adopted by the Middlesex Education Committee of erecting new premises for joint use as school clinics and welfare centres. The first two of these new "health centres" made their appearance in 1937, one at Long Lane, North Hillingdon being opened in April and a second at Ruislip Manor in November. These centres took the place of others which had been held in local halls, which with the growth of numbers in attendance had become unsatisfactory. The transfer of the welfare centre functions to new and specially designed premises has added much to the efficiency and to the pleasure of the service in the districts concerned. At each centre two weekly infant welfare sessions and a fortnightly ante-natal clinic were in operation at the end of the year.

The welfare centre held at the Church Hall, Eastcote, was moved to new premises in April when Eastcote House, the property of the Ruislip-Northwood District Council, was made available for this purpose.

An additional session was found to be necessary at Central Hillingdon and this centre has been open twice weekly since January.

Considerable increase has taken place in the ante-natal services provided by the Council. The inauguration of a salaried service of midwives made it imperative for suitable supervision to be given to their patients. Arrangements exist at all the Council's welfare centres for the medical examination of such cases, and, in addition, thirteen *ad hoc* ante-natal clinics were available at the beginning of 1937. During the year, four new clinics were opened at Stanwell, North Hillingdon, Ruislip Manor and Botwell, and additional sessions held at existing clinics, so that by the end of the year no clinic was open less often than twice a month, and at all busy centres weekly sessions were arranged. The Council approved the inauguration of midwives' clinics, attended by health visitors and midwives only for the purpose of exercising supervision over normal cases, the women concerned being referred for two or more examinations by one of the Council's medical staff during the course of their pregnancies. Such arrangements ensure that the ante-natal examination of pregnant women by the Council's midwives is carried out in suitable premises, relieves the midwives of much home visiting and enables some measure of observation to be kept upon the methods of ante-natal examination practised by them. No midwives' clinics were started by the end of the year, but arrangements were in progress for their inauguration.

The arrangements whereby ante-natal cases, considered by medical officers in charge of the ante-natal clinics to present points of clinical difficulty, are referred for an opinion to obstetrical surgeons on the staff of the Council's general hospitals is working very well, and the women so referred appreciate the convenience of attending a consultative clinic within reasonable distance of their homes and the ease with which admission to hospital for confinement can be arranged in those cases where it is thought advisable.

Equally satisfactory has been the scheme whereby women booked for admission to any of the Council's general hospitals are kept under routine supervision at the local ante-natal clinics, thereby saving the women many journeys to hospital, and bringing them in contact with the centre at which they will attend with their infants after delivery.

The scheme for the provision of fresh or dried milk to expectant and nursing mothers and children under the age of five has been amended by the removal of certain limitations which were previously placed upon the issue of milk from welfare centres. Upon the recommendation of the medical officer, milk is now supplied in necessitous cases to:—

- (a) Nursing mothers for a period of three months after confinement, or while actually suckling their children. This provides for mothers suffering from post-partum debility and unable to suckle their children.
- (b) Expectant mothers at any time during the course of pregnancy.
- (c) Children up to five years of age.

With regard to the amounts to be issued the following maximum scale is authorized:—

For infants under two months of age—one pint of fresh milk per day or one pound of dried milk per week.

For children over two months of age and expectant and nursing mothers—two pints per day of fresh, or two pounds per week of dried milk.

Cod or halibut liver oil, cod liver oil and malt, &c., are also issued, the amount prescribed being left to the discretion of the medical officer of the centre.

The increase in the amount of milk authorized brings the County's scheme into line with the suggestions made in the report of the Advisory Committee on Nutrition to which the Ministry of Health drew the attention of Local Authorities in Circular 1519. The Advisory Committee recommended that the "average daily consumption of milk per head should be about two pints for expectant and nursing mothers and from one to two pints for children."

An experimental scheme of dental inspection for children between the ages of two and five years has been started in one area of the county. A high proportion of children inspected by the dental staff at school on attaining the age of five years are found to be in need of treatment, and it was felt that if such children could be inspected at an earlier age, a certain number of cases of caries and occlusion and consequent jaw deformity might be avoided or treated in their initial stages.

In addition to the measures outlined above, the Council makes many other provisions for the welfare of mothers and young children. These have been described in detail in previous reports but may be briefly recapitulated.

Dental and ophthalmic treatment is arranged in connection with the school clinics, and also treatment for minor ailments. Financial assistance is provided towards the fee of a home help during the puerperium. A consulting obstetric physician is employed to visit cases of difficult labour or of puerperal pyrexia, when requested to do so by the practitioner in attendance upon a case. Arrangements exist for the admission to hospital of cases of puerperal pyrexia and of ophthalmia neonatorum, and for the bacteriological examination of specimens of pathological material.

Admission of suitable cases is arranged to orthopædic hospitals and to convalescent homes, and birth control advice is given, through the agency of voluntary clinics, to expectant and nursing married women in attendance at the Council's welfare centres in those cases where further pregnancy would be detrimental to health.

The following tables give comparative figures, for the past four years, of the attendances of women and children at the Council's welfare centres, and the home visiting undertaken by health visitors :—

Attendances at Welfare Centres.

	1934.	1935.	1936.	1937.
<i>Ante-natal Clinics—</i>				
Number of sessions held	187	199	223	328
New cases attending	770	761	1,054	1,634
„ post-natal cases attending	—	—	—	127
Total attendances made	1,856	2,053	2,843	5,029
<i>Welfare Centres—</i>				
Number of sessions held	2,273	2,115	2,236	2,452
New cases attending—				
Expectant mothers	477	339	427	358*
Infants under 1 year of age	3,214	2,755	3,134	3,614
Children (1 to 5 years)	1,341	1,426	1,633	1,947
Total attendances made—				
Expectant mothers	1,918	1,390	1,642	1,306
Mothers attending with infants and children	85,751	78,741	89,469	108,900†
Infants	56,959	52,279	57,119	68,143
Children (1 to 5 years)	52,656	48,806	56,178	67,377
Total attendances	197,284	181,216	204,408	245,726
Average attendance of infants and children each session	48	48	51	55

* Including 5 post-natal cases.

† „ 9 „ „ „

Home visits made by Health Visitors.

	1934.	1935.	1936.	1937.
Ante-natal visits	2,770	2,752	2,683	3,239
Visits to infants under 1 year	19,667	18,229	18,318	20,087
Visits to children (1 to 5 years)	24,555	20,844	21,526	23,949
Total home visits	46,992	41,825	42,427	47,275
Total number of visits to individual families	37,221	35,448	36,097	39,986

The tables on the following pages give particulars regarding the situation and times of sessions of the Council's ante-natal clinics and welfare centres, with the name of the medical officer in charge of each.

COUNTY COUNCIL ANTE-NATAL CLINICS.

Urban Districts.	Address of Centre.	Day and Time of Ante-natal Session.	Medical Officer in Charge.
Feltham	Feltham, Council School	Wednesday, 9.30 a.m.	Dr. Wilson.
	Hanworth—Village Hall	First and third Thursday in each month, 2.30 p.m. ..	Dr. Back.
Friern Barnet	Whetstone—Congregational Church Hall, Oakleigh Road	First and third Thursday in each month, 2.0 p.m. ..	Dr. Stephen.
Hayes and Harlington	Harlington—Village Hall, Cherry Lane	Second and fourth Tuesday in each month, 9.30 a.m. ..	Dr. Wright.
	Hayes—Townfield Council School	Wednesday, 9.30 a.m.	Dr. Shelley.
Potters Bar	South Mimms—St. Giles's Parish Room	Second and fourth Thursday in each month, 9.30 a.m. ..	Dr. Campbell.
Ruislip-Northwood	Ruislip Manor—Lady Banks Council School, Dawlish Drive	Second and fourth Friday in each month, 2.30 p.m. ..	Dr. Burn.
Staines	Ashford—Wesleyan Church School Room, Clarendon Road	Friday, 9.30 a.m.	Dr. Ewen.
	Staines—Kingston Road Council School	Second and fourth Thursday in each month, 9.30 a.m. ..	Dr. Cellan-Jones.
	Stanwell—Women's Institute	Second and fourth Tuesday in each month, 2.30 p.m. ..	Dr. Ewen.
Sunbury	Halliford—New Hall, Upper Halliford	First and third Friday in each month, 2.0 p.m. ..	Dr. Heddy.
Uxbridge	Uxbridge—109, High Street	Second and fourth Wednesday in each month, 9.30 a.m. ..	Dr. Glyn-Jones.
	North Hillingdon—Oak Farm Council School, Long Lane, Hillingdon	Second and fourth Monday in each month, 2.0 p.m. ..	Dr. R. A Jones.
Yiewsley and West Drayton	Harmondsworth—The Old School, Moor Lane	First and third Thursday in each month, 9.30 a.m.	Dr. Cellan-Jones.
	Yiewsley—Central Hall, Fairfield Road	Second and fourth Thursday in each month, 2.0 p.m. ..	Dr. Porter.

COUNTY COUNCIL WELFARE CENTRES.

Urban Districts.	Address of Welfare Centre.	Day of Meeting (2.30 p.m.).	Medical Officer in Charge.
Feltham.. ..	Bedfont—Public Hall, New Road ..	Monday ..	Dr. Cellan-Jones.
	Feltham—Council School	{ Monday, Tuesday & Wednesday }	Dr. Wilson.
	Hanworth—Village Hall	{ Tuesday & Friday }	Dr. Moir.
Friern Barnet	Congregational Church Hall, Bellevue Road.	Wednesday }	Dr. Stephen.
	Sydney Road Council School	Friday }	
	Whetstone—Congregational Church Hall, Oakleigh Road.	Tuesday }	
Hayes and Harlington..	Harlington — Village Hall, Cherry Lane.	{ Tuesday & Wednesday }	Dr. Matthews
	Hayes—Queen's Hall, Station Road	{ Monday, Thursday & Friday }	Dr. Matthews.
	Hayes—Townfield Council School ..	{ Tuesday & Wednesday }	Dr. Shelley.
	Hayes End—Methodist Church Hall, Uxbridge Road.	{ Thursday & Friday }	Dr. Shelley.
Potters Bar	Potters Bar—Village Hall	Wednesday }	Dr. Campbell.
	South Mimms — St. Giles's Parish Room.	Thursday }	
Ruislip-Northwood ..	Eastcote—Eastcote House	Wednesday }	Dr. Wright.
	Northwood — Methodist Assembly Room, Hallowell Road.	Tuesday }	
	Ruislip—Manor Farm	Thursday }	Dr. Burn.
	Ruislip Manor—Lady Bankes Council School, Dawlish Drive.	{ Monday & Wednesday }	
	South Ruislip—Legion Hall, West End Road.	Tuesday ..	
Staines	Ashford — Wesleyan Church School Room, Clarendon Road.	{ Thursday & Friday }	Dr. Ewen.
	Staines—Kingston Road Council School.	Tuesday 9.30 a.m. ; Wednesday }	Dr. Cellan-Jones.
	Stanwell—Women's Institute ..	Monday ..	Dr. Ewen.
Sunbury	Ashford Common — The Pavilion, Spelthorne Sports Club.	Wednesday ..	Dr. Moir.
	Shepperton—Council School ..	Tuesday ..	Dr. Cellan-Jones.
	Sunbury — Congregational Church Hall, Rooksmead Road.	{ Monday & Wednesday }	Dr. Heddy.
Uxbridge	Upper Halliford—New Hall	Thursday ..	Dr. Heddy.
	Harefield—Memorial Hall	Thursday ..	Dr. Tibbles.
	Central Hillingdon—British Legion Hall, Uxbridge Road, Hillingdon Heath	{ Monday & Wednesday }	Dr. Glyn-Jones
	North Hillingdon—Oak Farm Council School, Long Lane.	{ Wednesday & Friday }	Dr. R. A. Jones
	West Hillingdon—St. Andrew's Hall	Thursday ..	Dr. R. A. Jones.
	Ickenham—New Church Hall ..	Tuesday ..	Dr. R. A. Jones.
	Uxbridge—109, High Street	{ Tuesday & Friday }	Dr. Glyn-Jones.
	Harmondsworth—Old School, Moor Lane.	Thursday ..	Dr. Cellan-Jones.
Yiewsley and West Drayton	Yiewsley—Central Hall, Fairfield Road	{ Tuesday & Friday }	Dr. Porter.

Provision of Milk, etc.—The following table gives information as to the cost of fresh and dried milk, &c., issued at the centres during the *financial* year ended 31st March, 1938.

Year 1937-38.	Amount.	Cost Price.	Contributed by Mothers.	Charge on Scheme.
		£ s. d.	£ s. d.	£ s. d.
Fresh milk	61,500 gal. (approx.)	6,682 2 5	—	6,682 2 5
Dried milk	46,305 lbs.	3,446 12 8	2,623 13 8	822 19 0
Cod-liver oil, malt, &c.	27,935 lbs.	1,833 5 6	1,148 14 3	684 11 3
	Totals ..	11,962 0 7	3,772 7 11	8,189 12 8

The net cost to the County Council shows an increase of £2,969 9s. 3d. on the net cost for the previous financial year.

Ophthalmic Treatment.—Part-time ophthalmic surgeons have been appointed by the Education Committee under the Council's scheme for the treatment of school children, and their services are available for the treatment of certain cases referred from the welfare centres. If the parents' circumstances permit, they are required to pay the cost price of any spectacles supplied, together with a charge of 1s. for examination and fitting.

The following table summarizes this work carried out during the year.

	Mothers.	Children.
Errors of refraction (including squint)—		
Refracted—(a) for first time	66	100
(b) retests	1	12
Other defects or disease of the eyes—		
Cases examined	11	36
Provision of spectacles—		
Spectacles prescribed	61	66
Spectacles supplied by clinic	61	64
Repairs to glasses arranged by clinic	3	8
Referred to hospital for—		
Lachrymal obstruction	—	13
Conjunctivitis	—	7
Other conditions	2	14

By arrangement with the Harrow Urban District Council, cases referred from the District Council's welfare centres are seen by the County Council's ophthalmic surgeon at the clinic established by the Middlesex Education Committee at Wealdstone. Refraction is carried out at an agreed charge between the two councils and glasses when required are supplied at a flat rate.

Dental Treatment.—At the dental clinics established for school children by the Education Committee, treatment is provided for expectant and nursing mothers, or children below school age, who are referred on account of oral sepsis or dental caries.

During the financial year, 1937-38, the sum contributed towards the cost of dental treatment including the supply of dentures, was £505 5s. 5d., while the actual cost of the dentures only was £291 2s. 6d.

The following table gives particulars of the dental work which has been carried out during the year under the Council's Maternity and Child Welfare scheme :—

Dental inspection and treatment.	Mothers.	Children under 5 years of age.
Inspected	1,002	753
Attendances	4,260	1,703
Treatment completed	477	667
Extractions (gas)	2,889	1,602
„ (local anæsthetic)	2,985	504
Other treatments	2,448	730
Fillings	648	695
Dentures completed	327	—
„ repaired	15	—

By agreement between the County Council and the local authorities concerned, the dental treatment of expectant and nursing mothers and of children below school age attending welfare centres in Southall and Harrow, is undertaken at the County Council's dental clinics, and the work carried out under these agreements is included in the above table.

Treatment of Ophthalmia Neonatorum.—Arrangements exist whereby infants suffering from ophthalmia neonatorum may be admitted to St. Margaret's Hospital, Kentish Town, one of the hospitals included in the Special Hospitals Service of the London County Council. During 1937, 18 cases of ophthalmia neonatorum were notified in the area for which the County Council is the authority for maternity and child welfare. Eight infants were treated at St. Margaret's Hospital and ten at home; all made satisfactory recoveries with no apparent injury to vision.

“ Refresher ” Courses for Health Visitors.—In order that the health visitors may keep in touch, with recent developments of their work, arrangements are made each year for about one quarter of the staff to attend the Winter School for Health Visitors held in January at Bedford College and organized by the Women Public Health Officers' Association. In this way, health visitors are given the opportunity of bringing their work up to date at intervals of not more than four years. The “ refresher ” course is much appreciated by the students, who give an account of the work, with short abstracts of the lectures and demonstrations, to their colleagues at one of the monthly meetings of the Council's health visitors.

During the year visits were paid by the health visitors to the maternity block and children's wards at the West Middlesex County Hospital and to the new sanatorium at Harefield. Further visits to institutions carried on by the Council are planned in order that health visitors may appreciate the far-reaching character of the Council's public health activities and be able to give useful information concerning this work when visiting in the homes of the people.

Treatment of Puerperal Pyrexia.—Two patients were admitted to the North Western Hospital on the advice of Mr. J. M. Wyatt, F.R.C.S., the County Council's consultant, and four patients were sent to Queen Charlotte's Hospital Isolation Block. All the women made satisfactory recoveries.

Investigation of Maternal Deaths.—During the course of the year Dr. Back carried out investigations into the deaths of those women who died in childbirth in the districts in Middlesex for which the County Council is the maternity and child welfare authority.

CHILD LIFE PROTECTION.

At the beginning of the year the County Council's register contained the names of 166 foster-parents, having in their care 280 children. During the year, 76 additional foster-parents notified their intention of undertaking for reward the nursing and maintenance of infants, and 74 foster-parents notified that they had ceased to have infants in their care. Notifications of the reception of 258 infants, of the removal of 216 from the care of foster-parents, and of the deaths of two infants were received.

During 1937, the Council's health visitors, in their capacity of infant protection visitors, paid 142 first visits and 1,660 subsequent visits to the homes of foster-children. In 23 instances visits were made by Dr. Back or Miss Coleman in connection with special enquiries it was considered necessary to make with regard to certain foster-children.

Inspection and Supervision of Food.

The Acts and Regulations dealing with the supervision of food supplies which are administered by the County Council deal with (a) certain powers and duties connected with the production of milk and (b) adulteration of food.

MILK PRODUCTION.

Milk and Dairies (Consolidation) Act, 1915.—For a number of years past, the County Council has arranged for the routine collection of samples of milk from Middlesex producers and retailers, and for the examination of such samples by animal inoculation at the Lister Institute of Preventive Medicine. The object of this investigation, which proceeds continuously week by week throughout the year, is to ascertain to what extent the milk supply of the County contains living tubercle bacilli, with a view to taking such steps as may be possible for the improvement of the position.

During the course of 1937, the Lister Institute examined for tubercle bacilli 289 samples which had been submitted by inspectors of the County Council. In seven instances results were not obtained owing to premature death of the animals inoculated or to other accidental causes. Of the 282 specimens in which investigation was carried to a conclusion, living tubercle bacilli were found in 16—equivalent to 5·7 per cent. Only one sample of “accredited milk” was examined, and in this, no tubercle bacilli were found.

The following table shows the results which have been obtained since the year 1927 :—

Year.	Number of samples for which a definite result was obtained.	Number containing living tubercle bacilli.	Percentage of tubercle-infected milk.
1927	272	28	10·3
1928	228	23	10·1
1929	277	21	7·6
1930	272	22	8·1
1931	256	14	5·5
1932	266	31	11·6
1933	287	25	8·7
1934	289	17	5·9
1935	282	21	7·4
1936	292	20	6·8
1937	282	16	5·7

With the exception of the set-back occurring in the years immediately following the economic crisis of 1931, the figures show a reasonable and steady improvement in the County's milk supply. At the same time the present position is that of samples of raw milk taken at random in the County of Middlesex, approximately one in 18 is found to contain living tubercle bacilli; and this is a state of affairs which cannot be viewed with any degree of equanimity. The association between the bacillus of bovine tuberculosis and non-pulmonary tuberculosis in man has been abundantly proved and there can be no reasonable doubt that, though the position is improving, the tubercle infected milk supply is continuing to take its toll of death, disease and crippling among the young people of this country. The position is all the more tragic in that it is entirely preventable. The ideal remedy, and one which has been carried out in certain countries abroad, is the eradication of tuberculosis from the herds; and this is a scheme upon which the Ministry of Agriculture and Fisheries has recently embarked. From the very magnitude of the task, however, it must of necessity be some years before there can be any hope of its completion. In the meantime *efficient pasteurisation* affords a simple, inexpensive and entirely effective safeguard, not only against tuberculosis but also against other milk-borne diseases. In this year of enlightenment and widespread public interest in health matters, it is indeed an anomaly that the sale of raw ungraded milk should continue to be tolerated.

Of the 16 infected samples of milk found in 1937, four were reported to have been produced in Middlesex and 12 in other counties. Diseased animals were traced on 10 of the farms concerned (two farms in Middlesex and eight in other counties) and 10 cows were slaughtered by the County Councils concerned under the provisions of the Tuberculosis Order, 1925, of the Ministry of Agriculture. One of these 10 cows was lent to the National Institute for Research in Dairying for experimental purposes previous to being slaughtered.

In the case of the six remaining farms no evidence of bovine tuberculosis could be detected on veterinary examination of the herds, but in one instance a cow had died after calving between the date of the sample being taken and the inspector's visit, and in another instance a suspicious cow had been sold to a knacker on the day the sample was taken.

In Willesden, for many years past, the Borough Council has carried out the routine examination for tubercle bacilli of milk retailed within the borough. The Medical Officer of Health informs me that, during the year, 48 samples of milk, taken from Willesden retailers, were examined for the presence of tubercle bacilli by animal inoculation. One sample produced outside Middlesex was found to contain living tubercle bacilli, and as a result one cow was slaughtered by the County Council concerned.

Milk and Dairies Order, 1926.—Mr. Reginald Wooff, M.R.C.V.S., the County Council’s whole-time veterinary inspector, continued during 1937 to pay quarterly visits to every milk-producing farm in the County. At each visit Mr. Wooff carried out a clinical examination of all milch cattle and, where necessary, supplemented his clinical findings by bacteriological investigations. In addition to these regular routine visits, a large number of special visits were paid to farms in order to follow up defects noted on previous occasions. Mr. Wooff has submitted the following report on the year’s work :—

“ In my last report I said that the weather was having a bad effect on the cattle, and this appears to have been true, as the number of positive samples shows an increase, and the farmers have frequently complained that they were short of milk. The incidence of mastitis, I should say, has decreased during the past twelve months, though the loss from this disease is still a problem for the farmer. The number of samples showing a streptococcal infection has certainly declined, and I think an attack on this disease, with concentrated research, will be of extreme benefit to the farmer and the community at large.

During the year it has been possible, in addition to supervisory, or following up, visits of inspection, to make routine examinations at the farms in the County each quarter. Approximately, 17,000 clinical examinations of cows were made and, as a result of these inspections, 76 animals were found to be suffering from tuberculosis and were handed over to the local veterinary inspectors of the Diseases of Animals Sub-Committee. Of these 76 animals, 69 were slaughtered, whilst 7 were deemed not to be suffering from tuberculosis within the meaning of the Order.

In the laboratory, the work has progressed during the year, and, although the number of samples examined was fewer this year, the number of positive results shows an increase. 154 samples of milk were taken, of which 21 showed the presence of tubercle bacilli and 41 samples of sputum proved positive in 13 cases.

The following table compares the numbers under each heading during the four years I have been here :—

Year.	Cases Reported.	Samples.			
		Milk.	Positive.	Sputum.	Positive.
1934	28	160	11	15	6
1935	53	291	15	15	3
1936	75	241	18	19	5
1937	76	154	21	41	13

The fall in the number of samples of milk may be taken as an indication of the decrease in the incidence of streptococcal infection during the year, and the increase in the number of positive cases to the lapse of a period of time when no inspection was carried out.

There appears to be no doubt that continual routine inspection is absolutely essential as a minimum, as the effects of an ‘ open ’ case of tuberculosis in a herd will show its effects for several years. It also enables an animal to be ‘ spotted ’ at a much earlier stage, proof of which, I think, is shown by the fact that the average figures of compensation per case paid by this County Council were :—1934, £7 5s. ; 1935, £8 5s. ; 1936, £9.

It is the intention of the Ministry to eliminate the presence of tuberculosis in gradually increasing areas by means of the use of the tuberculin test, and those areas which contain a large number of ‘ self-contained ’ herds and which show a low incidence will probably be the first to be cleared. These areas will then become ‘ attested areas.’ ”

Milk (Special Designations) Order, 1936.—Under the terms of this Order, which came into operation on 1st June, 1936, the County Council is the authority for the granting of licences to the producers of “Tuberculin Tested” and “Accredited” milk. Every farm in respect of which an application for a licence to produce “tuberculin tested” or “accredited” milk is received, is visited by Dr. Perkins, by the Veterinary Inspector of the County Council and by the Instructor in Dairying employed by the Education Committee. The health of the animals, the condition of the premises and the methods employed on the farm are fully investigated. A licence is granted only if the County Council, from the reports of its officers, is satisfied with the conditions obtaining. Farms under licence are periodically visited and samples of milk regularly subjected to bio-chemical and bacteriological examination to ensure that satisfactory methods of milk production are being maintained.

There are in Middlesex four herds, licensed for the production of tuberculin tested milk, on farms situated in Enfield, Finchley, Ruislip-Northwood and Wembley.

The number of producers of “accredited” milk continued to increase during 1937, and at the close of the year there were 37 dairymen licensed to produce this grade of designated milk in Middlesex, the farms concerned being situated in Ealing (2), Enfield (8), Harrow (5), Hayes and Harlington (2), Heston and Isleworth, Potters Bar (9), Ruislip-Northwood, Southall, Southgate, Staines, Sunbury, Uxbridge (4) and Wembley.

Tuberculosis Order, 1925.—This Order of the Ministry of Agriculture is administered by the Diseases of Animals Sub-Committee of the County Council. I am informed by the Clerk of the County Council that during 1937, visits were made by the Council’s part-time veterinary surgeons to 81 premises at which bovine tuberculosis had been reported or was suspected, in most instances as the result of visits made by Mr. Wooff, the County Council’s whole-time veterinary officer. Veterinary examination of 285 animals was carried out and 81 animals, in which tuberculous lesions, as defined by the order, existed, were slaughtered. The compensation paid by the County Council to the owners of slaughtered animals amounted to £701 5s. 9d.

ADULTERATION.

The Acts and Regulations dealing with adulteration of food and drugs are administered by the Public Control Department of the County Council. I am indebted to Mr. R. A. Robinson, Barrister-at-Law, Chief Officer of the Public Control Department, for the information regarding this branch of work.

Public Health (Dried Milk) Regulations, 1923 and 1927.

Public Health (Condensed Milk) Regulations, 1923 and 1927.

No action was taken under these Regulations during the year.

Public Health (Preservatives, &c., in Food) Regulations, 1925 and 1927.

In the table on page 50, the articles marked * were examined for the presence of preservatives.

Food and Drugs (Adulteration) Act, 1928.—In the following table are set out particulars of samples submitted to the County Analyst by officers of the Public Control Department.

Food or Drug.	Number of samples examined.	Number of samples adulterated or not up to standard.
Almonds, ground	3	—
Arrowroot	1	1
*Banana Curd	2	—
Brandy	5	—
Bread	1	—
*Bread and Butter	1	—
*Butter	53	3
Camphorated Oil	2	—
Cocoa	3	—
Coffee	4	—
*Cream	41	—
*Cream Pastries	22	14
Cyder	1	—
Gin	5	2
*Glacé Cherries	1	—
*Gooseberries	1	—
*Grape Fruit Cordial	2	—
Haddock	1	—
Iodine, tincture	1	—
*Jam	7	1
Lard	7	—
*Lemonade	2	—
*Lemon Curd	4	—
Lemon Sole	1	1
*Lemon Spread	1	—
Liver, calf's	2	2
Liver, lamb's	30	30
Liver, sheep's	22	22
*Margarine	1	—
*Marmalade	1	—
*Meat Paste	1	—
*Milk	1,051	20
*Milk, condensed	1	—
*Milk, new	42	25
*Milk, sterilized	6	—
Oats.. .. .	2	—
Peas.. .. .	4	—
Pepper	3	—
Rum	9	—
Sardines	2	—
*Sausages	5	4
Sild	3	—
Stout	1	1
Sweets	1	—
Vinegar	95	48
Whisky	14	6
Totals	1,468	180

In addition to the above, 2,334 samples were examined during the year by officers of the Public Control Department.

During the year, 104 prosecutions were instituted in respect of the following articles of food :—

Cream pastries	7	Milk	26
Liver, calf's	2	Vinegar	16
Liver, lamb's	28	Gin	2
Liver, sheep's	19	Whisky	4

Infectious Diseases.

SMALLPOX.—No cases of smallpox occurred in Middlesex during 1937.

SCARLET FEVER.—In the year 1934 the incidence of scarlet fever was higher than in any year since 1921. Since the peak figure of 1934 (7,459 cases and a case-rate of 4·12) the incidence of the disease and likewise its severity has materially and consistently declined. In 1937 there were notified in the County 4,802 cases, with a case-rate of 2·38 per 1,000 persons living. The number of fatal cases of scarlet fever in 1937 was 14, corresponding to a case mortality-rate of 0·29 per cent. and a death-rate from scarlet fever of 0·007 per 1,000 population. A death-rate of 0·01 per 1,000 was recorded in England and Wales, London and the Great Towns. The districts in the County in which the incidence of scarlet fever was greatest were Feltham (4·95) and Hayes and Harlington (4·78).

DIPHTHERIA.—The incidence of diphtheria in 1937 showed a rise in comparison with the figure for 1936 which was the lowest on record. During 1937 there were notified 1,994 cases of diphtheria, corresponding to an incidence-rate of 0·99 per 1,000 persons living. This must be regarded as a satisfactorily low rate, comparing favourably as it does with the rates for London (1·93), the Great Towns (1·81) and England and Wales (1·49). In only two previous years on record has the incidence rate in Middlesex been below unity.

The number of fatal cases of diphtheria was 79 (73 of which were in children under 15 years of age), corresponding to a case-mortality rate of 3·96. The death-rate from diphtheria per 1,000 persons living in Middlesex was 0·04. The corresponding rate for London was 0·05, the Great Towns 0·08 and England and Wales 0·07. So far, therefore, as both incidence and mortality of diphtheria are concerned, Middlesex was in a very favourable position in 1937. The districts in which the highest incidence was recorded in the County were Southall (2·31), Staines (2·29), and Willesden (2·13).

Immunisation.—By the close of 1936 every child then living in one of the Council's scattered homes, and found by test to be susceptible to diphtheria, had received a course of immunising injections. During 1937, accordingly, it only was necessary to deal with children admitted within the preceding 12 months. The number affected, therefore, was much smaller, amounting to 143 children in all.

They are classified according to age and the result of the preliminary Schick test, in the following table.

	5 years old and over.	Under 5 years.
Total number dealt with	102	41
Preliminary Schick test—		
Schick negative	39	—
Schick positive	62	—
Received course of T.A.F. injections	63*	41*

* Includes one child who remained "Schick positive" after a previous course of injections.

Unfortunately it has not been practicable up to the present to carry out a further round of Schick tests in order to ascertain how many of the children showed a satisfactory response to the course of injections.

ENTERIC FEVER.—Sixty-seven cases of diseases of the typhoid and paratyphoid group of fevers were notified during 1937, as compared with 104 in 1936. The cases were fairly evenly distributed throughout the County. There were five deaths from enteric during the year. The case-rate for 1937 was 0·03 per 1,000, the death rate 0·002 per 1,000, and the case mortality-rate, 7·5 per cent.

COUNTY AND DISTRICT RATES, 1937.

Scarlet Fever, Diphtheria, Enteric Fever.

Boroughs and Urban Districts.	Number of cases notified, with case-rate per 1,000 living. Number of deaths recorded, with death-rate per 1,000 living.											
	Scarlet Fever.				Diphtheria.				Enteric Fever.			
	Cases Notified.		Deaths Recorded.		Cases Notified.		Deaths Recorded.		Cases Notified.		Deaths Recorded.	
	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.	No.	Rate.
Acton (<i>Borough</i>)	207	3·00	—	—	69	1·00	6	0·09	2	0·03	1	0·01
Brentford and Chiswick (<i>Borough</i>)	201	3·24	1	0·02	39	0·63	1	0·02	2	0·03	—	—
Ealing (<i>Borough</i>)	315	2·02	1	0·01	123	0·79	2	0·01	5	0·03	—	—
Edmonton (<i>Borough</i>)	282	2·78	1	0·01	109	1·07	5	0·05	9	0·09	1	0·01
Enfield	160	1·83	—	—	132	1·51	4	0·05	3	0·03	—	—
Feltham	142	4·95	—	—	15	0·52	—	—	1	0·03	—	—
Finchley (<i>Borough</i>)	146	2·26	—	—	12	0·19	—	—	2	0·03	—	—
Friern Barnet ..	49	1·84	—	—	10	0·38	—	—	—	—	—	—
Hampton	3	0·84	—	—	—	—	—	—	—	—	—	—
Hampton Wick..	—	—	—	—	—	—	—	—	—	—	—	—
Harrow	415	2·37	2	0·01	95	0·54	4	0·02	2	0·01	—	—
Hayes and Har- lington	190	4·78	2	0·05	12	0·30	1	0·03	—	—	—	—
Hendon (<i>Borough</i>)	244	1·70	—	—	122	0·85	7	0·05	2	0·01	—	—
Heston and Isle- worth (<i>Borough</i>)	242	2·43	1	0·01	18	0·18	1	0·01	6	0·06	—	—
Hornsey(<i>Borough</i>)	134	1·39	1	0·01	107	1·11	1	0·01	2	0·02	—	—
Potters Bar ..	10	0·90	—	—	6	0·54	—	—	—	—	—	—
Ruislip-North- wood	138	3·80	—	—	22	0·61	1	0·03	—	—	—	—
Southall(<i>Borough</i>)	141	2·73	—	—	119	2·31	6	0·12	1	0·02	—	—
Southgate (<i>Borough</i>)	59	0·89	—	—	9	0·14	—	—	3	0·05	—	—
Staines	61	2·11	1	0·03	66	2·29	1	0·03	—	—	—	—
Sunbury	57	3·58	—	—	4	0·25	—	—	—	—	—	—
Teddington ..	12	2·04	—	—	6	1·02	—	—	—	—	—	—
Tottenham ..	306	2·09	1	0·01	236	1·61	10	0·07	7	0·05	1	0·01
(<i>Borough</i>)												
Twickenham (<i>Borough</i>)	133	1·58	—	—	110	1·31	2	0·02	2	0·02	1	0·01
Uxbridge	135	3·22	—	—	26	0·62	5	0·12	2	0·05	—	—
Wembley	423	3·69	—	—	72	0·63	2	0·02	3	0·03	—	—
(<i>Borough</i>)												
Willesden (<i>Borough</i>)	483	2·57	1	0·01	400	2·13	17	0·09	10	0·05	1	0·01
Wood Green ..	72	1·35	1	0·02	46	0·86	3	0·06	2	0·04	—	—
(<i>Borough</i>)												
Yiewsley and West Drayton	42	2·70	1	0·06	9	0·58	—	—	1	0·06	—	—
THE COUNTY ..	4,802	2·38	14	0·007	1,994	0·99	79	0·04	67	0·03	5	0·002

DYSENTERY.—This disease is normally very uncommon in Middlesex. The number of cases in a year frequently does not reach double figures and in those years of greater prevalence, in which the total number of cases in the County have reached perhaps 50, the increase has been due to small outbreaks in institutions, usually mental hospitals, where the condition, so-called “asylum dysentery,” is very prone to make its appearance. The year 1937, however, for no ascertainable reason saw a very marked increase in the incidence of dysentery in the County, no fewer than 323 cases being

notified in the course of the year. The disease began to increase in prevalence in the middle of November, reached its peak early in December, and thereafter, though showing some decline, remained prevalent during the early part of 1938. During the last week of November and the first three weeks of December, over 200 cases were notified. The disease was by no means confined to Middlesex, sporadic outbreaks occurring without any apparent connection in many parts of the country. The brunt of the attack was borne, however, by London and the Home Counties, where more than half the total number of cases for the whole country occurred.

The districts in Middlesex in which the greatest number of notifications were received were:—Enfield (114), Willesden (35), Hendon (31), Edmonton (28), Tottenham (26), Friern Barnet (25), and Harrow (24).

From enquiries made at the time from medical officers of health of the districts most affected, it appeared that in the majority of cases the causal organism was the *Sonne bacillus*. Practically all the cases were of a mild character and subsequently recovered.

ERYSIPELAS.—This disease, like scarlet fever and the most serious form of puerperal sepsis, is a streptococcal infection. The number of notifications of erysipelas for the past four years was:—

769 in 1934; 605 in 1935; 593 in 1936, and 614 in 1937.

CEREBRO-SPINAL FEVER.—Forty-nine cases of cerebro-spinal meningitis were notified with 33 deaths. Thirteen of the fatal cases were those of children below the age of two years.

ACUTE ENCEPHALITIS LETHARGICA.—Five new cases of the disease in its acute form were notified during 1937. Twenty deaths from the disease in its acute or chronic form occurred and of this number 15 were of individuals above the age of 45 years.

ACUTE POLIOMYELITIS AND ACUTE POLIOENCEPHALITIS.—An increased prevalence of these conditions made its appearance not only in Middlesex but in other parts of England and in certain countries abroad during the course of 1936. A relatively high incidence of these infections was also apparent during 1937, 59 cases of poliomyelitis and three of polioencephalitis being notified. Of this number, 53 cases occurred in the second half of the year.

The same arrangements which had been instituted in 1936, for the admission of cases and suspected cases to a unit at the West Middlesex County Hospital, was continued during 1937.

Seven deaths from poliomyelitis and seven from polioencephalitis were reported in the County during the year.

MEASLES.—The compulsory notification of measles is operative in only a few districts in the County, so that accurate information of the incidence of the disease is not available. The mortality from measles, however, is an indirect measure of its incidence, and the following table shows the annual number of deaths from measles in Middlesex during the past 10 years:—

Year.				Deaths.	Year.				Deaths.
1928	..	..	..	216	1933	..	..	..	6
1929	..	..	..	6	1934	..	..	..	143
1930	..	..	..	135	1935	..	..	..	7
1931	..	..	..	16	1936	..	..	..	109
1932	..	..	..	133	1937	..	..	..	13

The biennial fluctuation, which is characteristic of measles, is well shown.

PNEUMONIA.—The number of notifications of *acute* pneumonia in the County during 1937 was 1,948, equivalent to an incidence-rate of 0·97 per 1,000 of the population. These figures show a substantial increase over the corresponding figures for 1936, due to a very greatly increased incidence of pneumonia experienced in January, 1937. During this month alone, 626 notifications were received in Middlesex, or nearly one-third of the total for the year. The prevalence of the disease in January was by no means confined to Middlesex, but was experienced throughout the country.

The incidence-rate of pneumonia for England and Wales during 1937 was 1·36 per 1,000; for London, 1·18 per 1,000 and for the Great Towns, 1·58 per 1,000.

The number of deaths from *all forms* of pneumonia in Middlesex during 1937 was 1,260, corresponding to a death-rate from pneumonia of 0·63 per 1,000 of the population.

PUERPERAL FEVER AND PUERPERAL PYREXIA.—The Public Health Act of 1936, which came into operation on 1st October, 1937, removed an anomaly which has existed since 1926, when the term “puerperal pyrexia” was coined. Since that time two literally synonymous phrases have been in use to describe two notifiable clinical conditions of fever during the lying-in period. The Public Health Act of 1936 ceases to recognise “puerperal fever” as a notifiable condition and the term “puerperal pyrexia” now embraces all notifiable conditions of raised temperature occurring during the puerperium.

During the year, 412 cases of puerperal pyrexia were notified and during the first 39 weeks of the year notifications of 107 cases of puerperal fever were received under the old Regulations. Thus, during 1937 there were notified in all 519 cases of puerperal pyrexia and puerperal fever, equivalent to a case rate of 16·9 per 1,000 births. The comparable figures for 1936 were 439 notifications and a case rate of 15·1 per 1,000 births.

The number of deaths due to puerperal sepsis in the County was 29, equivalent to a mortality-rate from sepsis of 0·95 per 1,000 live births. This rate, although not so low as that recorded in 1936, namely, 0·89 per 1,000 live-births (the lowest rate ever recorded in Middlesex), marks a gratifying decrease below the corresponding rates of recent years:—1935, 1·56; 1934, 1·74; 1933, 2·12; 1932, 1·77. These figures are illustrated graphically in the chart which appears on page 11. It is, to say the least, significant that so sharp a fall in mortality from puerperal sepsis has occurred during the past two years coinciding with the introduction into general use of sulphonamide compounds and allied chemo-therapeutic substances in the treatment of streptococcal and other infections of the blood stream.

OPHTHALMIA NEONATORUM.—The number of cases notified in 1937 was 139, or a case-rate of 4·53 per 1,000 births.

MALARIA.—Two cases of malaria, one of which had been contracted abroad, were notified. In the other case, the disease had been induced for therapeutic purposes.

ANTHRAX.—One case occurred in Willesden, that of a woman who was employed as a horse-hair spinner. She was removed to the Central Middlesex County Hospital, where she died.

UNDULANT FEVER.—One case was notified in the Urban District of Ruislip-Northwood.

CHOLERA, PLAGUE, TYPHUS.—No cases of these diseases were notified.

PUBLIC VACCINATION.

The table on page 57 has been compiled from the annual returns of the several vaccination officers of the County. It gives information as to the degree of compliance with the Vaccination Acts by the end of January, 1938, of all infants born during the year 1936. The results of the operation of the Acts in Middlesex may be summarized as follows:—

Births registered during 1936	24,545*
Infants successfully vaccinated	9,716
Infants insusceptible to vaccination	78
Infants who had had smallpox	1
Statutory declarations of conscientious objection	9,600
Infants died unvaccinated	901
Vaccination postponed by medical certificates	375
Removals to other districts	1,648
Removals to places unknown, &c.	1,187
Otherwise unaccounted for	1,039

* This figure does not include re-registered births or cases of children born in other districts.

Of 24,545 infants whose births were registered in Middlesex during 1936, 901 died unvaccinated. Of the remainder, viz., 23,644, only 9,794 (41·4 per cent.), were successfully vaccinated or were certified to be insusceptible to vaccination. Statutory declarations of conscientious objection were made in respect of no fewer than 9,600 infants (40·6 per cent.) whilst 4,249 infants were not vaccinated for various other reasons (postponement on medical certificate, removal, &c.).

VACCINATIONS PERFORMED BY PUBLIC VACCINATORS DURING 1937.

Vaccination Districts.	Vaccinations.			Successful re-vacci- nations.
	Under 1 Year.	1 Year and upwards.	Totals.	
<i>North Middlesex—</i>				
Edmonton North	187	11	198	7
„ South	134	5	139	5
Enfield Chase	130	8	138	4
„ Town				
„ Highway and Ponders End	109	—	109	1
<i>North-East Middlesex—</i>				
Finchley North	77	9	86	6
„ South	37	4	41	3
Friern Barnet	26	6	32	3
South Mimms	43	6	49	3
Southgate	96	11	107	5
Winchmore Hill	44	2	46	3
Wood Green	186	11	197	8
<i>East Middlesex—</i>				
Highgate	92	9	101	10
Hornsey	232	29	261	11
Lower Tottenham East	61	7	68	4
„ Tottenham West	49	14	63	3
Tottenham South West	70	6	76	1
„ West Green	81	22	103	18
„ High Cross	53	10	63	6
<i>North-West Middlesex—</i>				
Burnt Oak and Watling Estate	55	7	62	5
Edgware, Little Stanmore and Lower Hale	130	7	137	2
Great Stanmore and Harrow Weald	85	—	85	—
Harrow	165	5	170	20
Hendon Central	188	12	200	3
„ South	123	10	133	5
Kingsbury	113	2	115	6
Mill Hill	92	4	96	53
Pinner	84	7	91	1
Wealdstone	226	37	263	10
Wembley	215	13	228	17

Vaccination Districts.	Vaccinations.			Successful re-vacci- nations.
	Under 1 Year.	1 Year and upwards.	Totals.	
<i>Central Middlesex—</i>				
Acton	177	13	190	21
Harlesden	621	31	652	5
Kilburn	520	14	534	14
<i>South Middlesex—</i>				
Brentford	91	12	103	7
Chiswick	183	14	197	17
Ealing and West Twyford	165	8	173	20
Greenford, Hanwell and Perivale	341	21	362	8
Heston and Hounslow	303	8	311	19
Northolt	55	1	56	3
<i>West Middlesex—</i>				
Cowley and Hillingdon	260	7	267	3
Harefield	29	2	31	—
Hayes	47	22	69	5
Norwood	185	9	194	11
Ruislip	199	5	204	8
Uxbridge and Ickenham	4	—	4	3
West Drayton and Yiewsley	67	3	70	—
<i>South-West Middlesex—</i>				
Ashford	149	3	152	4
Bedfont, Feltham and Hanworth	262	9	271	2
Cranford, Harlington, Sipson and Heathrow	78	4	82	—
Hampton	69	1	70	3
Hampton Wick	13	1	14	—
Harmondsworth, Longford and Stanwell	51	—	51	—
Isleworth	203	80	283	27
Shepperton and Littleton	26	2	28	3
Staines and Laleham	51	8	59	4
Sunbury	52	2	54	1
Teddington	158	8	166	11
Twickenham	296	12	308	13
<i>Institutions—</i>				
North Middlesex County Hospital and Edmonton House	9	—	9	1
Enfield House	—	—	—	—
Chase Farm	—	—	—	—
Redhill County Hospital	—	—	—	2
Redhill Institution	—	—	—	1
Staines Institution	2	—	2	—
Children's Homes, Ashford	—	—	—	—
Hillingdon County Hospital	147	—	147	—
Hillingdon Institution	—	—	—	—
West Middlesex County Hospital	2	1	3	—
Children's Homes, S. Middlesex area	—	—	—	—
Central Middlesex County Hospital	2	2	4	2
Children's Homes, Willesden	—	—	—	—
Ashford Residential School (L.C.C.)	—	—	—	—
Erskine Hill, Hendon Residential School (L.C.C.)	—	—	—	—
Totals	8,000	577	8,577	441

RETURN OF VACCINATION OFFICERS RELATING TO BIRTHS REGISTERED IN 1936.

Registration Sub-Districts comprised in the Vaccination Officer's District.	Vaccination Officers.	Number of Births registered from 1st January to 31st December, 1936.	Number of these Births duly entered by 31st January, 1938, in Vaccination Register, viz. :—				Number of these Births which, on 31st January, 1938, remained unentered in the Vaccination Register on account of—			Number of these Births remaining on 31st Jan., 1938, neither entered in the Vaccination Register nor temporarily accounted for.	Number of Certificates of successful Primary Vaccination of children under 14 received during 1937.	Number of Statutory Declarations of conscientious objection actually received during 1937.	
			Success- fully Vaccinated.	In- susceptible to Vaccina- tion.	Had Small Pox.	Statutory Declara- tions of con- scientious objection.	Died un- vaccinated.	Post- ponement by Medical Certificate.	Removal to other Districts.				Removal to places unknown and cases not found.
Edmonton	T. E. David	2,599	565	3	—	1,354	111	26	290	152	98	633	1,457
Enfield	H. Cooper	969	199	1	—	448	38	3	21	198	61	276	529
Tottenham, East	L. J. Atherton	648	129	1	1	385	28	13	3	30	58	394	679
Tottenham, West	"	467	91	1	—	278	25	4	—	21	47		
Finchley	S. M. Baldock	607	200	2	—	341	29	—	—	33	2	315	410
South Mimms	"	99	29	—	—	60	5	—	—	5	—		
Hornsey	G. E. Dew	781	467	11	—	234	18	2	26	11	12	485	242
Southgate	T. E. David	565	259	2	—	176	16	13	38	14	47	326	208
Wood Green	H. Cooper	469	179	—	—	188	5	5	45	19	28	253	198
Harrow	F. Moore	2,490	973	8	—	1,230	65	36	115	34	29	1,232	1,061
Hendon	A. E. Taylor	1,579	812	15	—	374	72	29	151	98	28	851	429
Edgware	Miss A. L. Coomber	1,694	720	3	—	540	55	3	191	—	182	889	599
Kilburn	W. H. Seabrook	718	312	2	—	192	33	12	6	89	72	818	195
Harlesden	J. C. James	1,168	505	1	—	334	74	—	198	51	5	827	344
Acton	G. F. K. Stidworthy	418	170	1	—	136	23	22	11	18	37	154	96
Ealing	B. W. La Nauze	1,155	551	7	—	472	39	4	33	37	12	595	408
Hayes	E. J. Burridge	1,043	326	2	—	496	27	17	31	45	99	310	464
Uxbridge	A. Finch	1,485	716	4	—	522	41	1	171	30	—	920	490
Hanwell	Mrs. J. Clough	718	236	4	—	321	23	43	60	31	—	440	311
Brentford	H. S. Baker	139	70	—	—	49	4	3	1	8	4	121	41
Chiswick	"	282	117	2	—	99	5	14	6	24	15	275	68
Isleworth	W. J. Barkwill	2,128	930	4	—	637	88	87	206	82	94	1,180	750
Staines	G. Mason	468	193	1	—	167	17	6	20	36	28	246	188
Sunbury	R. Flood	835	411	2	—	284	31	10	7	60	30	361	307
Twickenham	W. J. Barkwill	580	292	1	—	148	23	22	8	35	51	292	142
Hampton	Mrs. M. R. Baines	441	264	—	—	135	6	—	10	26	—	330	114
	Totals	24,545	9,716	78	1	9,600	901	375	1,648	1,187	1,039	12,523	9,730

TUBERCULOSIS.

The number of new cases of tuberculosis reported during the year by medical officers of health of the constituent local authorities of the County was 2,721, an increase of 201 above the number reported in 1936. Of these cases, 36 were those of persons who had changed their place of residence from one district to another within the County, and, in accordance with the Regulations, were the subject of primary notification in each district, whilst 6 were cases which in previous years had been brought to the notice of medical officers of health by means other than notification but which were formally notified in 1937. Thus the net number of new cases in the County as a whole was 2,679. This number includes not only the new cases which arose and were diagnosed in the course of the year, but also the considerable number of persons with established disease who removed into the County during the year.

Of the gross total, 2,312 (84·97 per cent.) were notified by medical practitioners or school medical officers, in accordance with the Regulations, and 409 (15·03 per cent.) came to the notice of medical officers of health otherwise than by formal notification.

The incidence-rate of tuberculosis (all forms) as measured by the number of cases reported, amounted to 1·15 per 1,000 persons living ; the corresponding incidence-rate of pulmonary tuberculosis was 0·96 per 1,000 persons living. Each of these figures is slightly higher than those obtaining in 1936, in which year the incidence rates were the lowest ever recorded.

The number of deaths from tuberculosis in 1937 was 1,177 of which 1,008 were due to pulmonary and 169 to non-pulmonary tuberculosis. The death-rate from all forms of tuberculosis in Middlesex for 1937 was 0·58, which is considerably below the lowest ever previously recorded. The corresponding death-rate for the country as a whole was 0·695. The death-rate from pulmonary tuberculosis in Middlesex at 0·50 also establishes a new low record.

The following table shows the age and sex distribution of the 2,679 new cases which came to the notice of the County Council in 1937, divided into pulmonary and non-pulmonary groups and compared with the number of deaths, similarly classified.

NEW CASES AND DEATHS DURING 1937.

Age Periods.	New Cases.				Deaths.			
	Pulmonary.		Non-Pulmonary.		Pulmonary.		Non-Pulmonary.	
	M.	F.	M.	F.	M.	F.	M.	F.
0-1	2	2	4	4	1	1	6	8
1-5	17	6	20	24	1	3	9	11
5-10	25	21	44	36	} 4	6	22	14
10-15	25	23	30	31				
15-20	101	111	26	28				
20-25	180	207	30	42	82	109	16	16
25-35	315	345	30	52	113	147	12	7
35-45	257	138	16	20	126	83	6	8
45-55	165	56	9	10	125	34	8	7
55-65	115	37	4	7	93	25	7	3
65 and upwards ..	36	18	4	6	42	13	1	8
Totals.. ..	1,238	964	217	260	587	421	87	82

In the table on page 60 are set out details relating to notifications of, and deaths from, tuberculosis in each district in Middlesex, together with the numbers of persons whose names at the close of the year were on the tuberculosis registers of the various local authorities.

The diagram on page 61 illustrates graphically the mortality from tuberculosis in Middlesex year by year since the beginning of the century. The strains, privations and hardships of the Great War, experienced both overseas and at home, associated in 1918 with the world-wide influenza pandemic, were responsible for an enormous rise in mortality from tuberculosis. Since the close of the war there has been a steady and moreover substantial reduction both of incidence and mortality of tuberculosis.

In the following table are set out figures showing notifications and deaths, and the corresponding rates, both for pulmonary tuberculosis and for all forms of the disease during the past ten years.

TUBERCULOSIS NOTIFICATIONS AND DEATHS FOR THE PAST 10 YEARS.

	Tuberculosis of Respiratory System.				All Forms of Tuberculosis.			
	Number of Noti- fications.	Rate per 1,000 living.	Number of Deaths.	Death-rate per 1,000 living.	Number of Noti- fications.	Rate per 1,000 living.	Number of Deaths.	Death-rate per 1,000 living.
1928	1,478	1.04	909	0.64	1,819	1.28	1,071	0.76
1929	1,606	1.10	1,058	0.73	1,911	1.31	1,215	0.83
1930	1,623	1.04	981	0.63	2,015	1.29	1,164	0.75
1931	1,749	1.07	989	0.60	2,120	1.29	1,160	0.71
1932	1,733	1.02	965	0.57	2,108	1.24	1,144	0.67
1933	1,750	1.00	1,046	0.60	2,082	1.19	1,224	0.70
1934	1,767	0.98	1,086	0.60	2,098	1.16	1,266	0.70
1935	1,826	0.98	1,028	0.55	2,151	1.15	1,187	0.64
1936	1,833	0.94	1,096	0.56	2,151	1.11	1,257	0.65
1937	1,932	0.96	1,008	0.50	2,312	1.15	1,177	0.58

With a disease so insidious in onset and generally speaking so chronic in character, progress made year by year in prevention and treatment as measured by figures is so fractional as to appear at first sight somewhat disheartening, having regard to the great efforts which have been, and are being, made to combat tuberculosis. To gain a proper conception of what has been achieved, it is necessary to pass under review a period of years. It may be interesting, for example, to compare the incidence and mortality of tuberculosis in 1937 with the corresponding figures of 15 years ago, i.e., of the year 1923, when the abnormal conditions created by the Great War had largely subsided. When this is done, it is seen that the annual incidence of the disease has been reduced by approximately one quarter and the deaths by one third. The following are the figures, expressed in each case in terms of 100,000 of the population in order to avoid the use of fractions.

Years 1923 to 1937—a Period of 15 Years.

Incidence rate of pulmonary tuberculosis has decreased from 123 to 96, a fall of 22 per cent.

„ „ „ non-pulmonary tuberculosis has decreased from 29 to 19, a fall of 34 per cent.

„ „ „ all forms of tuberculosis has decreased from 152 to 115, a fall of 24 per cent.

Death-rate of pulmonary tuberculosis has decreased from 72 to 50, a fall of 30 per cent.

„ „ „ non-pulmonary tuberculosis has decreased from 16 to 8, a fall of 50 per cent.

„ „ „ all forms of tuberculosis has decreased from 88 to 58, a fall of 34 per cent.

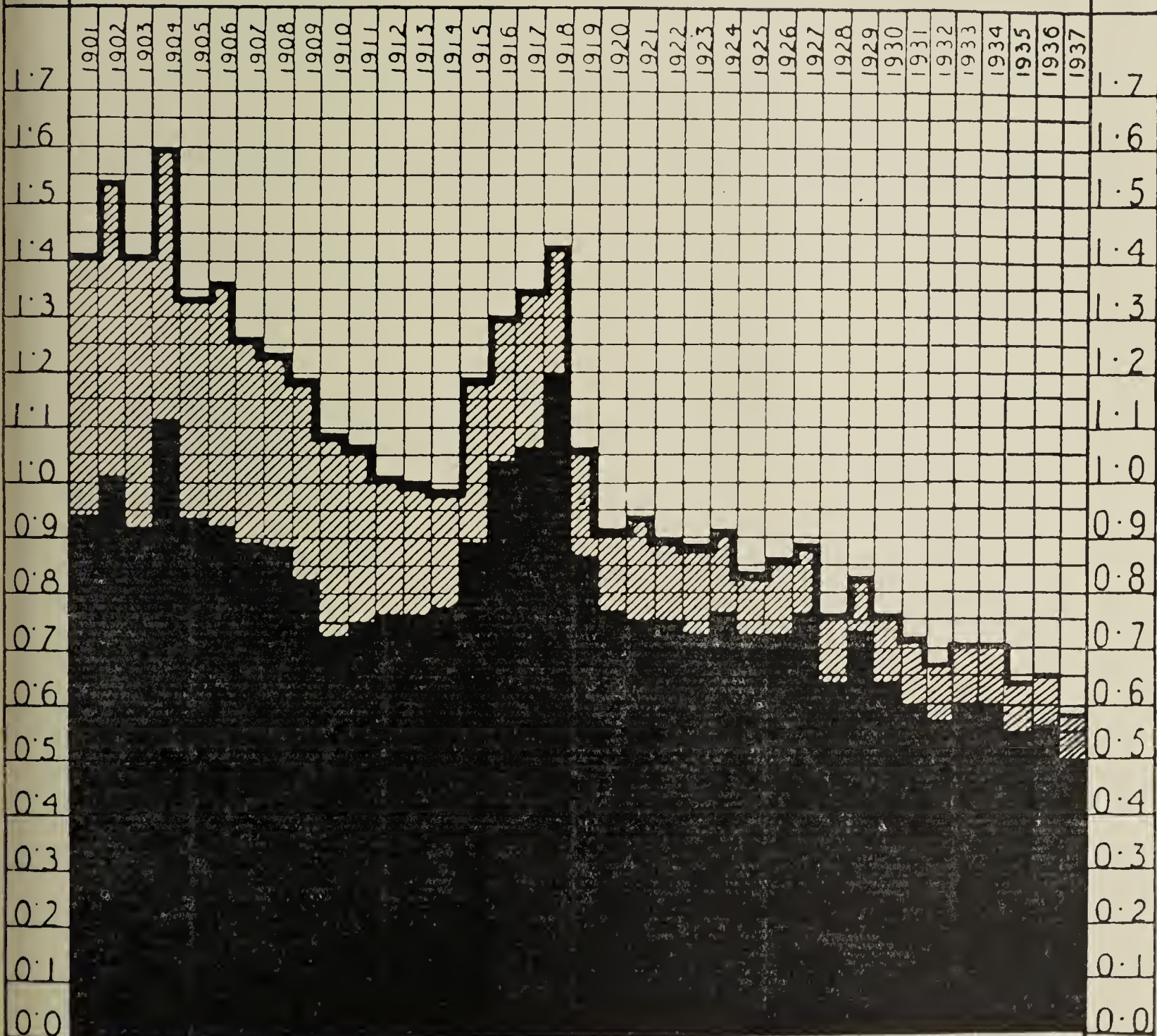
NOTIFICATIONS OF, DEATHS FROM, AND TOTAL NUMBER OF CASES OF TUBERCULOSIS IN EACH DISTRICT.

Boroughs and Urban Districts.	Tuberculosis (all forms).				Cases of tuberculosis on the Registers of Medical Officers of Health of districts in the County on 31st December, 1937.						
	Cases notified, 1937.		Deaths, 1937.		Pulmonary.			Non-Pulmonary.			
	No.	Rate per 1,000 living.	No	Rate per 1,000 living.	Males.	Females.	Total.	Males.	Females.	Total.	
Acton (<i>Borough</i>)	74	1.07	38	0.55	189	178	367	47	32	79	446
Brentford and Chiswick (<i>Borough</i>)	98	1.58	39	0.63	300	318	618	66	100	166	784
Ealing (<i>Borough</i>)	209	1.34	88	0.56	296	255	551	68	69	137	688
Edmonton (<i>Borough</i>)	150	1.48	91	0.90	266	192	458	70	68	138	596
Enfield	86	0.99	60	0.69	192	157	349	61	52	113	462
Feltham	16	0.56	14	0.49	15	1	16	15	9	24	40
Finchley (<i>Borough</i>)	56	0.87	24	0.37	89	101	190	19	32	51	241
Friern Barnet	16	0.60	16	0.60	40	34	74	10	12	22	96
*Hampton	1	0.28	2	0.56							†
*Hampton Wick	—	—	1	1.28							†
Harrow	250	1.43	89	0.51	286	243	529	57	62	119	648
Hayes and Harlington	35	0.88	25	0.63	68	46	114	20	24	44	158
Hendon (<i>Borough</i>)	164	1.14	68	0.47	334	291	625	115	107	222	847
Heston and Isleworth (<i>Borough</i>)	96	0.97	53	0.53	174	159	333	48	45	93	426
Hornsey (<i>Borough</i>)	107	1.11	54	0.56	321	284	605	99	101	200	805
Potters Bar	4	0.36	6	0.54	18	15	33	4	6	10	43
Ruislip-Northwood	35	0.96	19	0.52	66	55	121	21	11	32	153
Southall (<i>Borough</i>)	65	1.26	34	0.66	121	106	227	32	28	60	287
Southgate (<i>Borough</i>)	50	0.75	28	0.42	124	86	210	23	26	49	259
Staines	10	0.35	9	0.31	29	18	47	10	9	19	66
Sunbury	12	0.75	8	0.50	17	17	34	2	5	7	41
*Teddington	7	1.19	4	0.68							†
Tottenham (<i>Borough</i>)	211	1.44	105	0.72	312	245	557	74	63	137	694
Twickenham (<i>Borough</i>)	102	1.21	54	0.64	181	145	326	51	53	104	430
Uxbridge	28	0.67	22	0.52	61	55	116	22	21	43	159
Wembley (<i>Borough</i>)	124	1.08	58	0.51	243	192	435	39	43	82	517
Willesden (<i>Borough</i>)	241	1.28	131	0.70	355	333	688	71	90	161	849
Wood Green (<i>Borough</i>)	59	1.10	26	0.49	147	117	264	30	46	76	340
Yiewsley and West Drayton	6	0.39	11	0.71	54	44	98	20	23	43	141
The County	2,312	1.15	1,177	0.58	4,298	3,687	7,985	1,094	1,137	2,231	10,216

* Statistics for the last quarter of the year only.

† Included in Twickenham.

COUNTY OF MIDDLESEX TUBERCULOSIS DEATH RATES



▨ TUBERCULOSIS (ALL FORMS) DEATH RATE PER 1000 LIVING
 ■ TUBERCULOSIS (PULMONARY) DEATH RATE PER 1000 LIVING

SCHEME FOR THE PREVENTION AND TREATMENT OF TUBERCULOSIS.

No modifications in the County Council's Scheme were introduced during 1937, but this was the first full year of working upon the non-contributory basis outlined in last year's report. The new system has worked smoothly and fully justified its introduction.

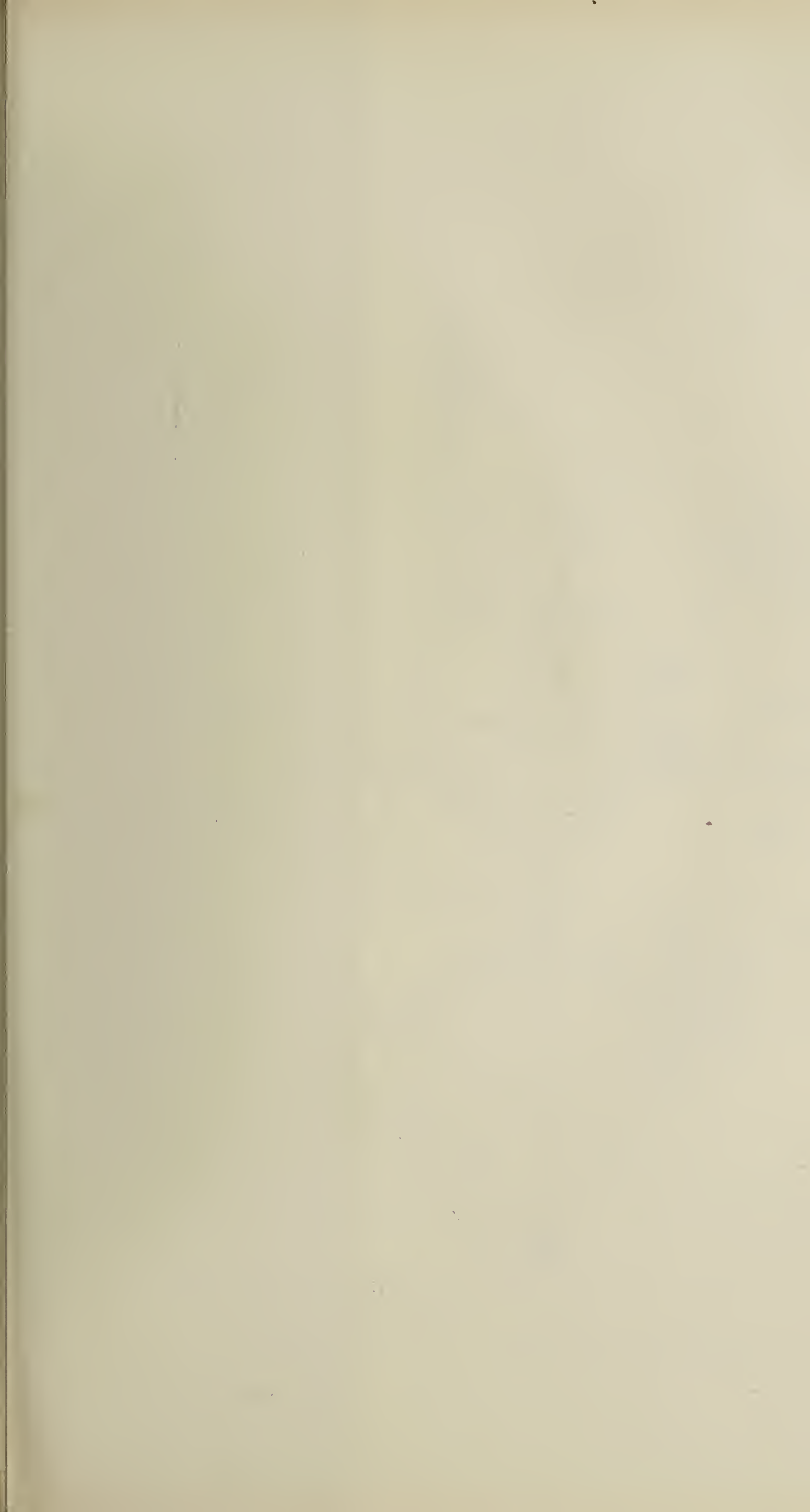
(a) Tuberculosis Dispensaries.

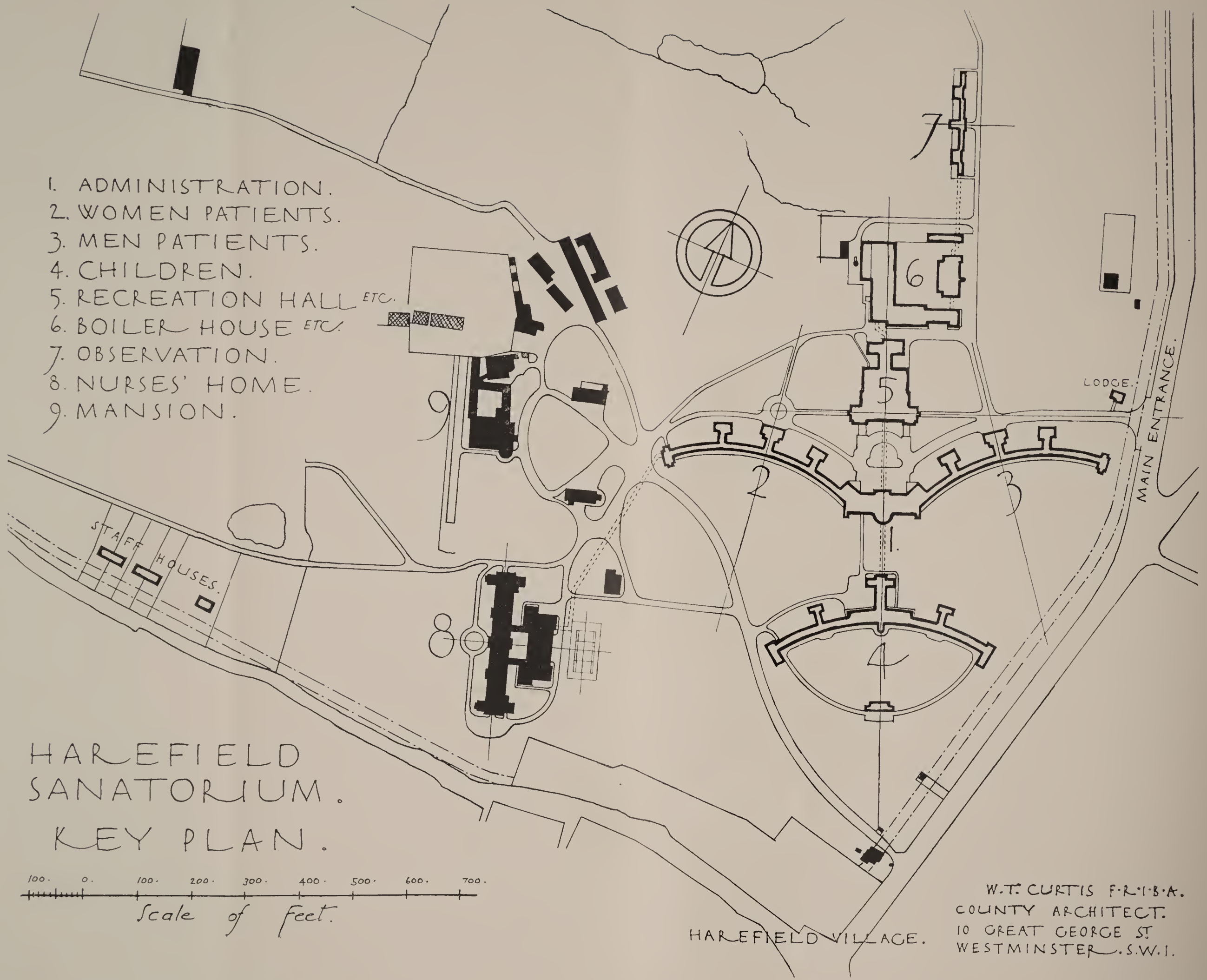
The new dispensary under erection in the grounds of Redhill County Hospital was not completed at the close of 1937. The dispensary arrangements, therefore, remained as follows :—

Area.	Districts served.	Tuberculosis Medical Officer.	Head Dispensary.	Branch Dispensaries.
1	Edmonton, Enfield	Dr. H. Evans ..	279, Fore Street, Edmonton.	—
1A	Tottenham	Dr. S. T. Davies ..	140, West Green Road, Tottenham.	—
2	Finchley, Friern Barnet, Hornsey, Potters Bar, Southgate, Wood Green.	Dr. J. R. B. Dobson	655, High Road, N. Finchley.	10, Alexandra Road, Hornsey.
2A	Harrow, Hendon, Ruislip-Northwood	Dr. A. S. Hall ..	53, Greenhill Crescent, Harrow (temporary).	158, The Broadway, West Hendon.
3	Wembley, Willesden. ...	Dr. O. Bruce ..	Pound Lane, Willesden.	—
4	Acton, Ealing, Hayes and Harlington, Southall, Uxbridge, Yiewsley and West Drayton.	Dr. J. T. N. Roe.	Green Man Passage, Uxbridge Road, West Ealing.	156, High Street, Uxbridge.
5	Brentford & Chiswick, Feltham, Heston & Isleworth, Staines, Sunbury, Twickenham.	Dr. W. S. Forbes ..	28, Bell Road, Hounslow.	14, Heathfield Terrace, Chiswick ; 12, Thames Street, Staines ; 1, Staines Road, Twickenham.

Measures of active treatment are not normally undertaken at the Council's tuberculosis dispensaries, the function of these being that of consultative and advisory centres. Certain specialized forms of out-patient treatment, however, are of increasing frequency and importance and provision has been made for these to be available at the County sanatoria, voluntary hospitals and elsewhere, the County Council being responsible for the cost. Some particulars of this work may be summarized as follows :—

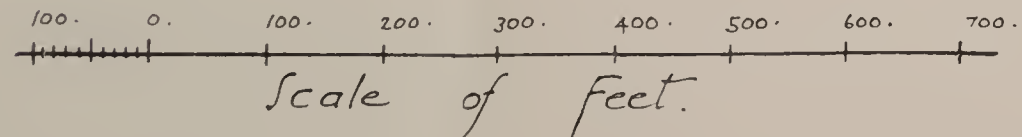
- (1) *Artificial Pneumothorax refills.*—During the year, 493 patients made a total number of 7,081 attendances for the purpose of continuing artificial pneumothorax refills : of this number, 200 were dealt with at the County Sanatorium, Harefield, where they made in all 2,494 attendances and 31 at the County Sanatorium, Clare Hall, where they made 273 attendances.
- (2) *Gold treatment.*—Injections of sanocrysin or other preparations of gold were given to five patients, who made 25 attendances at voluntary hospitals for the purpose.
- (3) *Light Treatment.*—Twenty-four patients, most of them suffering from lupus, received treatment by Finsen or other forms of light at certain voluntary hospitals in London, making a total of 1,244 attendances.
- (4) *After-care of Surgical Cases.*—Children who have received treatment for non-pulmonary tuberculosis in Heatherwood Hospital, Ascot, or other institutions belonging to the London County Council, are kept under supervision by an orthopædic surgeon at the London County Hall, Westminster, where minor manipulative treatment is given and surgical appliances are adjusted or renewed. During the year, 61 patients were supervised in this way and made 149 attendances.





- 1. ADMINISTRATION.
- 2. WOMEN PATIENTS.
- 3. MEN PATIENTS.
- 4. CHILDREN.
- 5. RECREATION HALL ETC.
- 6. BOILER HOUSE ETC.
- 7. OBSERVATION.
- 8. NURSES' HOME.
- 9. MANSION.

HAREFIELD
SANATORIUM.
KEY PLAN.



W.T. CURTIS F.R.I.B.A.
COUNTY ARCHITECT.
10 GREAT GEORGE ST
WESTMINSTER S.W.1.

(b) Institutional Accommodation.

During the year the whole of the available accommodation at the new sanatorium at Harefield came into use, and certain modifications in the distribution of patients enabled an additional 12 beds to be provided at Clare Hall Sanatorium. Thus, at the close of the year, the beds available at the County Council's own sanatoria numbered 576. Pulmonary cases in excess of this number and persons suffering from non-pulmonary tuberculosis are maintained in sanatoria and hospitals belonging to voluntary organisations or other local authorities in various parts of England.

The following statement shows the total number of beds belonging to, or reserved for the sole use of, the Council at the close of 1937 :—

Institution.	Accommodation.			Type of case.
	Adults.		Children.	
	M.	F.		
County Sanatorium, Harefield	150	150	60	Pulmonary—sanatorium.
County Sanatorium, Clare Hall, South Mimms.	4	4	10	Pulmonary—observation.
Victoria Home, Margate	132	66	—	Pulmonary—late sanatorium.
	—	—	6	Non-pulmonary.

HAREFIELD COUNTY SANATORIUM.

By March, 1937, the change-over from the old sanatorium to the new permanent structure was completed, and the latter was formally opened in October, 1937, by H.R.H. the Duke of Gloucester.

Since its opening, large numbers of distinguished visitors have inspected the buildings and the general opinion has been expressed that at Harefield is the finest sanatorium in the British Isles.

For the following constructional notes and for the plan facing this page, I am indebted to Mr. W. T. Curtis, F.R.I.B.A., the County Architect, by whom Harefield Sanatorium was designed :—

“ The new Sanatorium has been built to provide accommodation for 378 patients and is constructed chiefly of brick and reinforced concrete.

The general layout is aeroplane shape in outline, situated on an axial line running from North to South. It will be noted that the plan adopted, whilst providing complete separation of the sexes, allows of very adequate supervision by the nursing staff from the duty rooms incorporated in the wings.

The administrative centre has been planned to cope with future extension of the patients' accommodation, should the necessity arise. This centre, which contains the operating theatre suite, treatment rooms, x-ray department, committee room, dispensary, laboratories and general offices for the Medical Superintendent, Matron and Steward, is flanked on either side by the main nursing units.

The nursing units for men and women are situated East and West respectively of the administrative centre. They are three storeys in height, arranged in ward groups for one, two or four patients with separate ward administration and sanitary annexes. Recreation rooms and quiet rooms are situated at the ends of the ward units. A continuous corridor extends the whole length of this building on the North side and the ward units are so planned that the open, unobstructed balconies in front obtain the full benefit of a southerly exposure.

The children's block has been planned on somewhat similar lines, with, in addition, a small school connected to it by means of an open covered way. An ingenious arrangement whereby certain of the cubicles can be isolated from the remainder of the block should prove of value in the case of infectious disease being suspected.

The main dining room, recreation hall, central kitchen, steward's store, cold storage, etc., are situated to the North of the foregoing buildings in one group on the central axis line.

The boiler house block, with which is incorporated the laundry, main switch room, mortuary, garages, etc., is placed still further North of the buildings already mentioned.

The observation block is entirely separated from the sanatorium proper so as to obviate any contact between patients in whom the presence of tuberculosis is still in doubt and established cases of this disease. It is planned to provide separate accommodation for adults and children of both sexes.

Nursing units are all provided with suitably placed duty rooms for observation, consulting clinics and ward kitchens, and these departments are fully equipped for their several purposes. There are convenient and centrally placed sanitary annexes consisting of bathrooms, showers, lavatories, locker rooms and drying rooms.

The Sanatorium as a whole is fully equipped in a medical and mechanical sense and has been furnished in the most hygienic and modern manner, care having been taken in selecting the most suitable furniture and equipment for the purpose.

The Sanatorium has its own water supply and will generate a large part of its electric power on the site. The electrical, heating, steam, domestic hot water, cold water, telephones, fire alarms, wireless and other services are distributed throughout the Sanatorium from the engineering centre by means of a system of underground subways which completely link up the whole of the buildings.

The general heating of the buildings is effected by means of an invisible panel system.

The recreation hall has seating accommodation for 200 and is equipped with projection and re-winding rooms for cinema performances, and is electrically equipped for talking pictures and wireless relays to all buildings. A small stage for dramatic or other entertainments is fully provided with all necessary equipment. A recessed chapel at one end can be used in conjunction with the hall for religious services.

The gardens have been laid out in a simple manner with large areas of grass lawn, bordered with flowering trees and shrubs."

The following summary of the year's work at the sanatorium has been prepared by the Deputy Medical Superintendent, Dr. K. R. Stokes :—

The year covered by this report has been outstanding in the history of the sanatorium. At Christmas, 1936, the patients were transferred from the wards of the old sanatorium to those of the new. By March, 1937, all the available beds in the new buildings were in use, and in October the new sanatorium was formally opened by H.R.H. the Duke of Gloucester.

During the year steady progress has been made in the development of the sanatorium as a centre fully equipped for modern methods of diagnosis and treatment of pulmonary tuberculosis. The consequent increase, both in the volume and the responsibility of the work, has been met by the appointment of a senior physician.

The equipment of the X-ray department has been completed and a visiting radiologist and a full-time radiographer have been appointed. The excellent work turned out has been of the greatest assistance.

Further progress has been made in the equipment of the surgical theatre, and, with the appointment of a visiting surgeon, an important step was taken to make modern surgical treatment available at Harefield. It is anticipated that in 1938 this work of reorganisation will be completed, establishing in its entirety the treatment of pulmonary tuberculosis upon modern lines within the sanatorium.

Admissions, Discharges and Deaths.

	In the sanatorium on 31st Dec., 1936.	Admitted during the year.	Discharged during the year.	Deaths.	Remaining in the sanatorium on 31st Dec., 1937.
<i>Treatment :</i>					
Adults—					
Male	107	367	284	41	149
Female	125	312	251	37	149
Children—					
Male	31	43	34	3	37
Female	15	36	28	2	21
Total Treatment Cases ..	278	758	597	83	356
<i>Observation :</i>					
Adults—					
Male	—	47	43	—	4
Female	3	49	46	—	6
Children—					
Male	—	49	45	1	3
Female	—	27	24	—	3
Total Observation Cases ..	3	172	158	1	16
Totals	281	930	755	84	372

The transfer of patients from the old sanatorium provided an increase of beds from 316 to 378. The present complement is as follows :—

Treatment—150 Adult Males, 150 Adult Females, 60 Children	360
Observation—4 Adult Males, 4 Adult Females, 10 Children ..	18
	<hr/>
	378
	<hr/>

Results of Treatment.

The following table shows the condition of patients discharged after treatment during the year :—

Stage of disease on admission.	Number discharged.	Condition on discharge.			
		Quiescent. per cent.	Improved. per cent.	No material improvement per cent.	Died. per cent.
CLASS T.B. MINUS—					
Males	82	37·80	56·09	3·65	2·43
Females	76	38·15	50·00	9·21	2·63
Children	57	70·37	24·07	3·70	1·85
Total.. ..	215	46·04	45·58	6·04	2·32
CLASS T.B. PLUS—					
Group I—					
Males	28	17·85	78·57	3·57	—
Females	22	45·45	45·45	9·09	—
Children	1	100·00	—	—	—
Total.. ..	51	31·37	62·74	5·88	—
CLASS T.B. PLUS—					
Group II—					
Males	117	4·27	80·34	13·67	1·70
Females	104	3·84	80·76	15·38	—
Children	3	—	66·66	33·33	—
Total.. ..	224	4·01	80·35	14·73	0·89
CLASS T.B. PLUS—					
Group III—					
Males	98	1·02	41·83	19·38	37·75
Females	86	—	26·74	32·55	40·69
Children	6	—	—	33·33	66·66
Total.. ..	190	0·53	33·68	25·78	40·00

The classification of cases in this report is that suggested by the Ministry of Health. See explanatory notes on page 72.

Special Treatment.—Collapse therapy continues to be used in an increasing number of cases. Artificial pneumothorax was induced in 43 patients within the sanatorium, and 10 cases were admitted in which an artificial pneumothorax had been induced at other hospitals.

Special surgical procedures were carried out on 50 patients, distributed as follows :—

	At Hillingdon County Hospital.	At Voluntary Hospitals.
Thoracoplasty	1	5
Extra-pleural pneumothorax	1	—
Cauterisation of adhesions	9	7
Phrenic crush	17	5
Cauterisation of adhesions and phrenic crush	4	1
Totals	32	18

	£	s.	d.
Eggs for use in the institution	482	1	1
Eggs sold	102	11	9
Fowls for use in the institution	392	9	2
By-products (feathers, &c.)	57	1	2
Total value of produce from poultry farm	1,034	3	2

Total value of produce from garden, piggeries and poultry farm : £3,286 3s. 4d.

THE COUNTY SANATORIUM, CLARE HALL.

The following report on the work carried out at Clare Hall during 1937 has been prepared by the Medical Superintendent, Dr. F. A. H. Simmonds.

Admissions, Discharges and Deaths.

	In Sanatorium 31st Dec., 1936.	Admissions.	Discharges.	Deaths.	In Sanatorium 31st Dec., 1937.
Males	120	276	189	76	131
Females	66	130	104	24	68
Totals	186	406	293	100	199

Average number of beds available, 192·2.

Average number of occupied beds, 190·8.

Average length of stay, 178 days.

Average length of stay (excluding deaths), 202 days.

Average proportion of bed cases (*i.e.*, in bed for 2 meals or more), 78 per cent.

Table showing the districts from which patients were admitted to the sanatorium during the year.

Borough of Acton	4
„ Brentford and Chiswick	19
„ Ealing	11
„ Edmonton	23
„ Finchley	8
„ Hendon	40
„ Heston and Isleworth	17
„ Hornsey	23
„ Southall	7
„ Southgate	9
„ Tottenham	39
„ Twickenham	20
„ Wembley	26
„ Willesden	63
„ Wood Green	10
Urban District of Enfield	16
„ Feltham	5
„ Friern Barnet	3
„ Harrow	36
„ Hayes and Harlington	3
„ Potters Bar	5
„ Ruislip-Northwood	7
„ Staines	2
„ Sunbury	5
„ Uxbridge	3
„ Yiewsley and West Drayton	2
Total	406

Patients discharged during the Year.

(a) Diagnosis of tuberculosis confirmed	383
(b) Diagnosis of tuberculosis not confirmed	10
Total	393

Manner of Discharge.

Ordinary	..	..	..	..	..	..	..	242
Own request with Medical Superintendent's consent							..	38
At own request against advice				..	..	..	..	10
Dismissed..	..	..	..	..	..	..	..	3
Died	..	..	..	..	..	..	..	100
Total								393

NOTE.—Subsequent tables refer to tuberculous patients only.

Age grouping.

Age groups.				Males.	Females.	Total.
15-24	..	..	..	56	44	100
25-34	..	..	..	59	50	109
35-44	..	..	..	53	11	64
45-54	..	..	..	54	12	66
55 and over	..	..	..	36	8	44
Totals				258	125	383

Five tuberculous discharged soldiers (*i.e.* men receiving pension for tuberculosis attributed to war service) were treated during the year.

Duration of Stay.

Period.				Discharged.		Died.		Total.
				Males.	Females.	Males.	Females.	
One month or less	..	..	..	9	9	28	7	53
One to three months	..	..	..	61	26	22	8	117
Three to six months	..	..	..	57	21	8	2	88
Six to twelve months	..	..	..	44	23	10	7	84
Over twelve months	..	..	..	12	21	8	—	41
Totals				183	100	76	24	383
Total (males and females) ..				283		100		383

Analysis of results of treatment (according to classification on admission).

Stage of Disease.	Quiescent.	Improved.	No improve- ment.	Died.	Totals.	Total. Per cent.
Class T.B. Minus—						
Males	18	5	—	4	27	
Females	5	3	1	1	10	
Total	23	8	1	5	37	9·7
Class T.B. Plus—						
Group I—						
Males	9	1	—	—	10	
Females	—	1	2	—	3	
Total	9	2	2	—	13	3·4
Class T.B. Plus—						
Group II—						
Males	17	44	2	2	65	
Females	12	12	5	—	29	
Total	29	56	7	2	94	24·5
Class T.B. Plus—						
Group III—						
Males	1	46	40	70	157	
Females	4	23	32	23	82	
Total	5	69	72	93	239	62·4
TOTALS ..	66	135	82	100	383	100

Classification and terms used are those of the Ministry of Health. See notes on p. 72.

Bacillary content of sputum on discharge.

283 tuberculous patients were discharged-

Sputum.	Males.	Females.	Total.	Per cent.
Positive	112	71	183	64·7
Negative	71	29	100	35·3

In this connection, by a negative sputum is meant that on at least three consecutive examinations tubercle bacilli were not found (Ziehl Nielsen method), or that the patient had had no sputum for six weeks at least. Every endeavour is made to retain patients with a positive sputum or active disease whose home conditions are unsuitable because of overcrowding or the presence of children.

Treatment.—Supplementing the routine of sanatorium treatment, in which prolonged rest in bed has formed an increasingly important part, the following active measures of treatment were employed in patients discharged during the year.

Treatment.	Nos. of Patients.		
	Male.	Female.	Total.
Artificial Pneumothorax	24	12	36
including—			
A.P. induced before admission	4	5	9
Combined with other measures	19	6	25
Artificial Pneumothorax—			
Attempted and failed	9	10	19
Abandoned as incomplete	1	10	11
Phrenic nerve operations	13	6	19
Cauterization of adhesions	12	4	16
Thoracoplasty	4	7	11
Air replacement of effusion	2	—	2
Pneumoperitoneum	—	4	4
Sanocrysin	33	26	59

The following operative procedures were undertaken at the sanatorium during the year.

	No. of Operations.
Artificial pneumothorax inductions	113
" " refills	1,687
Paracentesis thoracis and removal of effusion	43
" " for diagnosis	13
Pleural lavage	78
Thoracoscopy and cauterization of adhesions	7
Phrenic nerve operations	36
Pneumoperitoneum	5
Various minor operations	10

The above figures include treatment of out-patients who numbered 36, making 282 attendances.

Some patients were transferred to other hospitals for treatment for which facilities were not available at Clare Hall ; the following procedures were carried out :—

Thoracoplasty	17
Extra-pleural pneumolysis	9
Cauterization of adhesions	25
Special investigations	3

They were subsequently re-admitted for the remainder of their sanatorium treatment. Six patients (five men and one woman) were transferred to a tuberculosis colony.

Dental Treatment.

Number of patients treated.	Number of attendances made by patients.	Extractions.		Fillings.	Other treatment.	Number of dentures completed.
		Under local anæsthetic.	Under gas.			
83	347	281	6	21	193	38

X-Ray Department.

Films taken at the North Middlesex County Hospital, 546.

In October, 1937, the X-ray apparatus was installed at Clare Hall, and since then the following work has been done :—

Films of chest, 621.

Screening examinations approximately number 3,000, since each patient is screened before and after a pneumothorax refill.

Pathological Department.

	No. of Examinations performed.					
Sputum (Ziehl Nielsen)	2,147
Urine (albumen or sugar only)	454
„ (full routine examination)	143
Pleural fluid	11
Cerebro-spinal fluid	1
Blood sedimentation test	575
„ cell counts	37

The number of post-mortem examinations in the year was 41.

Staff.

On the resignation of Dr. J. W. Craig, Dr. A. G. Hounslow was appointed assistant medical officer. He has held a number of important house appointments, including that of assistant resident medical officer at Brompton Hospital.

Miss Mary Brown retired on 16th July, from the post of matron, having attained the age limit, and having held this office for 20 years. Unsparing of her energy, her work was also characterised by a high sense of duty and by unwearying kindness to patients and staff. She is succeeded by Miss A. R. Spall, who was previously second Assistant Matron at the North Middlesex County Hospital.

Mr. W. H. Lister, M.P.S., was appointed pharmacist and assistant in the laboratory from 16th August.

Nurses Training School.

The following successes were gained in examinations :—

State Preliminary Examination .. .. .	..	..	..	..	..	2
Tuberculosis Association Certificate—						
Part I .. .. .	..	..	..	..	..	2
Part II .. .. .	..	..	..	..	..	5

Two nurses were transferred to County Hospitals to complete their general training.

Farm.—Vegetables, fresh fruit and flowers from the farm and garden were supplied to the patients. The value of this produce was £579 9s. 7d.

GENERAL REMARKS.

A consistent attempt has been made to apply the most efficient and thorough methods of treatment, whether old or new. Though a relatively high proportion of advanced cases with a poor outlook were admitted, the results of treatment have been encouraging and have fully justified the extra work done by the staff and the development of services not previously available. These include an operating room, X-ray department, and pathological service. It has thus been made possible for all treatment (especially collapse therapy) to be efficiently carried out. The introduction and increasing use of strict rest and methods of collapse have steadily improved the results of treatment during the last few years, as the following figures help to show :—

Year.	Admissions.	Discharged Quiescent.	Deaths.
1935	328	6	129
1936	412	46	133
1937	396	66	100

This marked improvement in the results of treatment could not have been achieved without the interest and ready help of all members of the staff, and the willingness of patients to co-operate in their long and arduous treatment.

STATISTICAL SURVEY OF THE WORK CARRIED OUT DURING 1937 UNDER THE COUNTY
TUBERCULOSIS SCHEME.

The tables appearing on the following pages are those prescribed by the Ministry of Health for the purpose of the annual statistical returns of the authority. These returns present in numerical form a very complete picture of the scope and amount of work carried out in connection with the County Council's scheme for the prevention and treatment of tuberculosis.

Tables A and B refer to the work of the dispensaries ; tables C, D and E relate to the amount of accommodation available and the extent of treatment afforded ; table F gives information as to the results of observation of doubtful cases, and table G the immediate results of treatment of definitely tuberculous persons. Table H aims at exhibiting statistically the after-history and ultimate fate of all tuberculous persons who have come under public medical treatment.

In order to appreciate the information contained in these tables, it is necessary to have in mind the precise meaning of the terms occurring therein, many of which are used in a special sense. Information on this matter is given below.

DEFINITIONS AND CLASSIFICATION.—Patients diagnosed as suffering from pulmonary tuberculosis are placed in the following categories :—

Class T.B. minus, viz., cases in which tubercle bacilli have never been demonstrated in the sputum ; and

Class T.B. plus, viz., cases in which tubercle bacilli have at any time been found. It should be noted that a patient originally in *Class T.B. minus* must be transferred to *Class T.B. plus* at any stage in the course of treatment if and when tubercle bacilli are found ; while, on the other hand, a patient who is once placed in *Class T.B. plus* can never revert to *Class T.B. minus*. *Class T.B. plus* is further subdivided into three groups as follows :—

Group I.—Cases with slight constitutional disturbance, if any, *e.g.*, there should not be marked acceleration of pulse nor elevation of temperature except of very transient duration ; gastro-intestinal disturbance or emaciation, if present, should not be excessive.

The obvious physical signs should be of very limited extent as follows :—Either present in one lobe only and in the case of an apical lesion of one upper lobe, not extending below the second rib in front, or not exceeding an equivalent area in any one lobe ; or where these physical signs are present in more than one lobe, they should be limited to the apices of the upper lobes and should not extend below the clavicle and the spine of the scapula.

No complication (tuberculous or other) of prognostic gravity should be present. A small area of dry pleurisy does not exclude a case from this group.

Group III.—Cases with profound systemic disturbance or constitutional deterioration, with marked impairment of function, either local or general, and with little or no prospect of recovery.

All cases with grave complications, whether tuberculous or not, are classified in this group, *e.g.*, diabetes, tuberculosis of larynx or intestine, &c.

Group II.—All cases which cannot be placed in Groups I and III.

Patients suffering from non-pulmonary tuberculosis are classified according to the site of the lesion as follows :—

- (1) Tuberculosis of bones and joints.
- (2) Abdominal tuberculosis (*i.e.*, tuberculosis of peritoneum, intestines or mesenteric glands).
- (3) Tuberculosis of other organs.
- (4) Tuberculosis of peripheral glands.

Patients suffering from multiple lesions are classified in one sub-group only, viz., in that applicable to the case which stands highest in the table.

Observation Cases.—Persons attending at, or in connection with, the dispensaries, in whose cases the tuberculosis officer cannot, within a period of one month from his first examination of the case, come to a definite diagnosis after physical examination and the application of the necessary tests. (These cases appear on Table A, under sections A (b) and B (b).)

Quiescent.—Cases which have no symptoms of tuberculosis and no signs of tuberculous disease except such as are compatible with a completely healed lesion, and in which sputum, if present, is free from tubercle bacilli.

Arrested.—In pulmonary cases the term “arrested” is applied only to cases which have been “quiescent” for a period of at least two years.

In non-pulmonary cases the term “arrested” is used as soon as there is reason to believe that the disease is unlikely to recur.

Recovered.—No patient is deemed to be “recovered” until in the case of pulmonary tuberculosis, five years, and, in the case of non-pulmonary tuberculosis, three years, have elapsed without any symptoms of active disease (*i.e.*, arrest has been maintained for three years).

TABLE A.
Return showing the work of the Dispensaries during the Year 1937.

Diagnosis.	Pulmonary.				Non-Pulmonary.				Total.				Grand Total.	
	Adults.		Children.		Adults.		Children.		Adults.		Children.			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
A.— <i>New Cases</i> examined during the year (excluding contacts):—														
(a) Definitely tuberculous ...	840	562	28	25	65	89	56	44	905	651	84	69	1,709	
* (b) Diagnosis not completed ...	—	—	—	—	—	—	—	—	19	19	8	2	48	
(c) Non-tuberculous ...	—	—	—	—	—	—	—	—	702	753	265	207	1,927	
B.— <i>Contacts</i> examined during the year:—														
(a) Definitely tuberculous ...	28	38	23	16	—	—	2	1	28	38	25	17	108	
* (b) Diagnosis not completed ...	—	—	—	—	—	—	—	—	—	—	2	2	4	
(c) Non-tuberculous ...	—	—	—	—	—	—	—	—	344	626	500	475	1,945	
C.— <i>Cases</i> written off the Dispensary Registers as:—														
(a) Recovered ...	78	80	13	15	14	24	30	24	92	104	43	39	278	
(b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Registers as tuberculous)	—	—	—	—	—	—	—	—	1,061	1,400	773	685	3,919	
D.— <i>Number of Cases</i> on Dispensary Registers on 31st December:—														
(a) Definitely tuberculous ...	2,499	2,044	184	163	227	285	264	224	2,726	2,329	448	387	5,890	
(b) Diagnosis not completed ...	—	—	—	—	—	—	—	—	19	19	10	4	52	
1. Number of cases on Dispensary Registers on 1st January ...					5,395	2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years ...					478			
3. Number of cases transferred to other areas, cases not desiring further assistance under the tuberculosis scheme, and cases "lost sight of" ...					671	4. Cases written off during the year as Dead (all causes) ...					804			
5. Number of attendances at the Dispensaries (including Contacts) ...					19,417	6. Number of Insured Persons under Domiciliary Treatment on the 31st December ...					91			
7. Number of consultations with medical practitioners:— (a) Personal ... (b) Other ...					543 4,239	8. Number of visits by Tuberculosis Officers to homes (including personal consultations) ...					1,852			
9. Number of visits by Nurses or Health Visitors to homes for Dispensary purposes ...					17,689	10. Number of:— (a) Specimens of sputum, etc., examined (b) X-ray examinations made ... in connection with Dispensary work					2,207 2,877			
11. Number of "Recovered" cases restored to Dispensary Registers and included in A (a) and A (b) above ...					23	12. Number of "T.B. plus" cases on Dispensary Registers on 31st December ...					3,190			

TABLE B.

Number of Dispensaries for the treatment of Tuberculosis (excluding centres used only for special forms of treatment).

Provided by the Council ...	13
Provided by Voluntary Bodies ...	Nil

* i.e., remaining undiagnosed on 31st December.

TABLE C.
Number of Beds available for the treatment of Tuberculosis on 31st December in Institutions belonging to the Council.

Name of Institution.	For Pulmonary Cases.		For Non-Pulmonary Cases.		Total.
	Adults.	Children under 15.	Adults.	Children under 15.	
County Sanatorium, Harefield	308	70	—	—	378
County Sanatorium, Clare Hall	198	—	—	—	198
<i>Public Health Hospitals.</i>					
North Middlesex County Hospital	44	—	5	1	50*
Redhill County Hospital	2	—	—	—	2
Central Middlesex County Hospital	16	—	4	—	20
Hillingdon County Hospital	7	—	—	—	7
West Middlesex County Hospital	35	—	6	—	41
<i>Poor Law Institutions.</i>					
Enfield House	—	—	1	—	1
Redhill Institution	4	—	—	—	4
Hillingdon Institution	—	—	—	1	1

* 20 balcony beds (in addition to above) available in good weather only.

TABLE D—(a).

Return showing the extent of Residential Treatment and Observation during the year in Institutions (other than Poor Law Institutions) approved for the treatment of Tuberculosis.

	In Institu- tions on 1st Jan. (1)	Admitted during the year. (2)	Discharged during the year. (3)	Died in the Insti- tutions. (4)	In Institu- tions on 31st Dec. (5)
(a) Number of doubtfully tuberculous cases admitted for observation—					
Adults—					
Males	—	47	42	—	5
Females	3	52	49	—	6
Children	2	79	76	—	5
Total	5	178	167	—	16
(b) Number of patients suffering from pulmonary tuberculosis—					
Adults—					
Males	452	989	801	138	502
Females	341	785	644	76	406
Children	57	73	54	6	70
Total	850	1,847	1,499	220	978
(c) Number of patients suffering from non-pulmonary tuberculosis—					
Adults—					
Males	77	60	60	10	67
Females	60	101	78	4	79
Children	109	103	92	5	115
Total	246	264	230	19	261
GRAND TOTAL ((a), (b) and (c)) ..	1,101	2,289	1,896	239	1,255

TABLE D—(b).

Return showing the number of patients admitted during the year for periods of one to three nights for artificial pneumothorax refills.

—					Total number of individual patients treated.	Number of admissions.	Number of discharges.
Adults—							
Males					3	3	3
Females					5	6	6
Children.. .. .					—	—	—
Total					8	9	9

TABLE E.

Return showing the extent of Residential Treatment provided during the year in Poor Law Institutions for persons chargeable to the Council.

—	In Institutions on 1st Jan. (1)	Admitted during the year. (2)	Discharged during the year. (3)	Died in the Institutions. (4)	In Institutions on 31st Dec. (5)
Number of patients suffering from pulmonary tubercu- losis—					
Adults—					
Males	3	51	28	24	2
Females	5	42	30	15	2
Children	—	1	1	—	—
Total	8	94	59	39	4
Number of patients suffering from non-pulmonary tuberculosis—					
Adults—					
Males	1	8	7	1	1
Females	1	1	1	—	1
Children	—	2	1	—	1
Total	2	11	9	1	3
GRAND TOTAL	10	105	68	40	7

TABLE F.

Return showing the results of observation of doubtfully tuberculous cases discharged during the year from Institutions approved for the treatment of Tuberculosis.

Diagnosis on discharge from observation.	For Pulmonary Tuberculosis.						For Non-Pulmonary Tuberculosis.						TOTALS.		
	Stay under 4 weeks.			Stay over 4 weeks.			Stay under 4 weeks.			Stay over 4 weeks.					
	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.
Tuberculous	20	16	19	—	2	13	—	—	3	—	1	2	20	19	37
Non-tuberculous.. ..	19	27	32	3	3	5	—	—	—	—	—	1	22	30	38
Doubtful	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1
TOTALS	39	43	52	3	5	18	—	—	3	—	1	3	42	49	76

TABLE G.—Return showing the immediate results of treatment of definitely tuberculous patients discharged during the year from Institutions (other than Poor Law Institutions) approved for the treatment of Tuberculosis.

Classification on admission to the Institution.	Condition at time of Discharge.	Duration of Residential Treatment in the Institution.												GRAND TOTALS.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
		Under 3 m'ths but exceeding 28 days			3-6 months.			6-12 months.			More than 12 months.				Totals.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
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PULMONARY TUBERCULOSIS.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								</

Note:—Patients whose stay in residential institutions has not exceeded 28 days are not included in this table.

SPUTUM NEGATIVE ON MORE THAN ONE OCCASION.

*CLASS T.B. MINUS—Died in Institution.
Particulars of the 13 cases (including 5 who were in institutions for under 28 days) coming within this category are as follows:—

SPUTUM NEGATIVE ON ONE OCCASION.

Cause of death—Generalised miliary tuberculosis 1
" " Chronic pulmonary tuberculosis 1
" " Miliary tuberculosis 2
" " Pulmonary tuberculosis and septic bronchitis 1

Cause of death—Pulmonary tuberculosis

" " Bronchiectasis and pulmonary tuberculosis

No sputum available.

Cause of death—Pulmonary tuberculosis
" " Collapse after operation for ischio rectal abscess; post-mortem showed healed pulmonary tuberculosis and tuberculous peritonitis
" " Tuberculous peritonitis and pleural effusion
" " Generalised miliary tuberculosis

3

1

1

1

1

1

TABLE H.—(a) PULMONARY TUBERCULOSIS.

Return showing in summary form (a) the condition at the end of 1937 of all patients remaining on the Dispensary Registers; and (b) the reasons for the removal of all cases written off the Registers. The Table is arranged according to the years in which the patients were first entered on the Dispensary Registers as definite cases of pulmonary tuberculosis, and their classification at that time.

[illegible]



In the first column of Table H (a) on pages 77 and 78 are grouped those persons who first came under public medical treatment previous to 1927. By the end of 1937, therefore, every member of this group then living had been under observation for at least eleven years, and the majority for considerably longer periods. The total number of pulmonary cases in the group under consideration is 6,864, but of these a large number, 2,056, have been lost sight of, either on account of their having left the County, or because they have signified they no longer desire public medical treatment, or for a variety of other reasons. Deducting this number there remains a balance of 4,808 patients, the condition of whom was known at the end of 1937.

These may be analysed as follows :—

PULMONARY TUBERCULOSIS. Class.	Total number for whom record is available.	Discharged as Recovered.		Disease arrested.		Dead.		Disease not arrested.	
		No.	Per cent.	No.	Per cent.	No.	Per cent.	No.	Per cent.
T.B. minus ..	1,723	1,382	80·2	47	2·7	287	16·7	7	0·4
T.B. plus, Gp. I	972	375	38·6	36	3·7	515	53·0	46	4·7
T.B. plus, Gp. II	1,200	135	11·2	41	3·4	962	80·2	62	5·2
T.B. plus, Gp. III	913	17	1·9	5	0·5	881	96·5	10	1·1
All Classes ..	4,808	1,909	39·7	129	2·7	2,645	55·0	125	2·6

VENEREAL DISEASE.

For many years Middlesex has been a partner in a joint scheme with London and a number of surrounding counties and county boroughs for the provision of treatment for venereal disease. The scheme is organized and administered by the London County Council on behalf of the members of the scheme, proposals being submitted each year by the London County Council for the consideration of the participating authorities and consultations and conferences between the respective medical officers of health taking place from time to time. The scheme is based upon the voluntary hospitals of London, at a number of which clinics for the treatment of venereal disease have been established. The extent to which these hospitals were used by Middlesex patients seeking treatment for venereal disease during 1937 is shown in the table which appears on page 83.

The total number of new cases from all areas participating in the scheme, dealt with at the clinics established at the various London hospitals, amounted during 1937 to 25,825 (a decrease of 252 upon the figure for the previous year). Of this number of patients, 2,927 (an increase of 6) were suffering from syphilis, 9,952 (a decrease of 91) from gonorrhœa, 219 (a decrease of 77) from soft chancre, whilst 12,727 (a decrease of 90) were found not to be suffering from venereal disease.

Thirty-four Middlesex women, whose pregnancies were complicated by infective venereal disease, were admitted to hostels under the scheme and occupied beds for an aggregate of 3,998 days, or 14·2 per cent. of the total of all participating authorities.

The Prince of Wales's Hospital, Tottenham.—In addition to its provisions under the joint scheme, the Middlesex County Council has an agreement with the Governors of the Prince of Wales's General Hospital, Tottenham, under which the Hospital, in consideration of an annual payment by the County Council for a term of years, has built, equipped and staffed a very excellent self-contained clinic for the treatment of venereal disease.

The new arrangements have been very successful and since the inauguration of the new department in 1934, the volume of work carried out at the Prince of Wales's Hospital in connection with venereal disease has greatly increased. The following notes and figures dealing with the work of the department during 1937 have been contributed by Dr. A. A. M. Reekie, the medical officer in charge.

NEW CASES.

Quarter			1936		1937	
			Males	Females	Males	Females
1st quarter	..	..	87	37	81	50
2nd	,,	..	96	43	87	42
3rd	,,	..	96	46	112	27
4th	,,	..	90	43	98	38
			369	169	378	157
Totals			538		535	

Decrease 3.

Total attendances : 1936, 32,874 ; 1937, 34,067 ; increase, 1,193.

Patients discharged as cured : 1936, 322 ; 1937, 293 ; decrease, 29.

Patients who ceased to attend : 1936, 262 ; 1937, 172 ; decrease, 90.

Patients transferred to other centres : 1936, 27 ; 1937, 50 ; increase, 23.

Patients transferred from other centres : 1936, 43 ; 1937, 24 ; decrease, 19.

Pathological work carried out in the department : 1936, Smears, 2,593 ; 1937, 2,354 ; decrease, 239.

Dark ground examinations, 1936, 70 ; 1937, 78 ; increase, 8.

In-patients.—In-patient days of treatment : 1936, 382 ; 1937, 135 ; decrease, 247.

Hours of Attendance.—The week-day hours continue unaltered from the previous year.

Medical Staff.—In April, 1937, Dr. Derwent Thompson resigned his appointment as Assistant Medical Officer to the Department, Dr. R. E. A. Price being appointed in his place.

Nursing Staff.—The personnel of the male and female nursing staffs remains unaltered from the previous year.

Research Work.—During the course of each year, new drugs and new methods of treatment are investigated as opportunity offers, and this year a limited number of cases of gonorrhœa were treated with drugs of the sulphonamide group. It is early yet to assess the results from this experimental group, but so far the therapeutic value of these drugs in this disease seems to be considerable, and the investigation will be continued and extended.

When suitable cases are available, it is intended to investigate the treatment of gonorrhœal complications (particularly rheumatism) by “hyperpyrexia” therapy (as advocated by American investigators) in collaboration with Dr. Walton, the Medical Officer in charge of the Physiotherapeutic department of the Prince of Wales’s Hospital.

General Remarks.—Co-operation with the other departments of this hospital and with all other institutions with which we are in contact, is active, and completely harmonious.

In conclusion, I wish to express my appreciation of, and my thanks, for the assistance given by my colleague, Dr. E. A. Price, and by the entire nursing staff of the Department during the past year, for it is entirely to their energy and co-operation that the efficiency of the Department is due.

Under the Council’s scheme all relations between patients and hospitals are entirely confidential and complete secrecy is maintained as to the identity of individuals treated. Treatment, moreover, whether in-patient or out-patient is provided free of charge, irrespective of the means of the persons treated. Most patients in need of treatment by the Council for venereal disease are dealt with under the scheme, but from time to time venereal disease cases need to be admitted for treatment to one or other of the Council’s own general hospitals, or (by arrangement between the Councils) to one of the London County Council’s general hospitals, not included in the scheme, where special facilities for treatment of venereal diseases exist. In order to avoid disparity in dealing with cases of venereal disease, the Council resolved in 1936 that any necessary treatment for venereal disease provided through the Council’s general hospital service should be granted free of charge and in these cases no assessment is made under Section 184 of the Public Health Act, 1936.

Payment of Travelling Expenses.—Travelling expenses are paid by the County Council to out-patients in necessitous circumstances, who otherwise might be unable to make the numerous attendances over long periods which are usually necessary if a cure is to be obtained. Information as to financial position is given by a patient to the hospital almoner who, confidentially, transmits a summary of the particulars to the County Medical Officer of Health. If approval is granted, the almoner advances the patient's fare on the occasion of each visit to the hospital and periodically claims repayment from the County Council. During 1937, a total of 171 individual patients were assisted in this way at a cost of £342 12s. 7d.

VENEREAL DISEASE.

Statement of Work done by Individual Hospitals in connection with Middlesex Patients during 1937.

Hospital.	NEW CASES.					Total attendances.	No. of in-patient days.
	Syphilis.	Soft Chancre.	Gonorrhoea.	Conditions other than venereal.	Total		
Great Ormond Street	8	—	4	160	172	552	385
Guy's	5	—	11	19	35	1,322	55
King's College	2	—	2	1	5	52	5
Metropolitan	2	—	6	9	17	750	—
Royal Free	23	—	81	209	313	3,682	697
Royal Northern	34	3	134	156	327	19,472	6
St. George's	10	—	56	51	117	1,459	19
St. Mary's	81	—	270	259	610	18,344	403
St. Paul's	2	—	10	18	30	1,439	1
St. Thomas's	25	—	69	193	287	6,596	401
Seamen's	—	1	2	—	3	17	99
South London for Women ..	—	—	1	7	8	70	—
University College	24	—	36	31	91	2,882	63
West London	99	—	367	492	958	34,798	510
Westminster	15	—	29	11	55	5,842	—
Whitechapel (L.C.C.) Clinic ..	2	—	13	22	37	1,570	47
Salvation Army Mothers ..	—	—	24	9	33	840	532
Children's, Waddon	—	—	—	—	—	—	247
Joint London Hospitals, Totals..	332	4	1,115	1,647	3,098	99,687	3,470
*Prince of Wales's, Tottenham ..	86	8	162	148	404	30,129	123
GRAND TOTAL	418	12	1,277	1,795	3,502	129,816	3,593

* These figures do not include 100 new cases, non-residents of the County, treated at the hospital, the cost being borne by the Middlesex County Council under agreement with the hospital.

VENEREAL DISEASE.

Comparative Statement for the Past Five Years.

		MIDDLESEX Patients treated at									
		London Hospitals.					Prince of Wales's Hospital, Tottenham.*				
		1933.	1934.	1935.	1936.	1937.	1933.	1934.	1935.	1936.	1937.
Number of persons dealt with at the clinics for the first time and found to be suffering from :—											
Syphilis ..	.. .. .	356	316	340	275	332	61	118	70	76	86
Soft chancre ..	.. .. .	7	4	7	8	4	6	—	2	8	8
Gonorrhoea ..	.. .. .	1,060	1,033	1,052	1,091	1,115	127	217	205	197	162
Conditions other than venereal ..	.. .. .	1,083	1,248	1,341	1,475	1,647	131	158	127	158	148
Totals ..	.. .. .	2,506	2,601	2,740	2,849	3,098	325	493	404	439	404
Total attendances ..	.. .. .	81,165	88,899	94,266	102,650	99,687	7,519	13,344	26,770	29,071	30,129
Number of "in-patient" days of treatment ..	.. .. .	3,271	3,210	4,546	3,737	3,470	214	132	81	370	123

* These figures do not include non-residents of the County treated at the hospital, the cost being borne by the Middlesex County Council under the agreement with the hospital.

APPENDICES.

I.—Annual Report by Dr. Ivor Lewis, Medical Superintendent of North Middlesex County Hospital.

II.—Annual Report by Dr. J. N. Deacon, Medical Superintendent of Redhill County Hospital.

III.—Annual Report by Dr. H. Carter, Medical Superintendent of Central Middlesex County Hospital.

IV.—Annual Report by Dr. W. A. Steel, Medical Superintendent of Hillingdon County Hospital.

V.—Annual Report by Dr. J. B. Cook, Medical Superintendent of West Middlesex County Hospital.



ANNUAL REPORT OF THE MEDICAL SUPERINTENDENT ON THE WORK OF
NORTH MIDDLESEX COUNTY HOSPITAL FOR THE YEAR 1937.

Staff

(31st December, 1937).

WHOLE-TIME MEDICAL STAFF.

Medical Superintendent.

Ivor Lewis, M.D., M.S. (Lond.), D.P.H.

Deputy Medical Superintendent and Obstetric Surgeon.

K. A. Hudson, M.B., Ch.M., M.C.O.G.

Physician.

C. Allan Birch, M.D., M.R.C.P. (Lond.), D.P.H.

Surgeons.

R. L. Galloway, M.B., Ch.B., F.R.C.S. (Edin.).

H. O. Blauvelt, M.D., C.M., F.R.C.S. (Eng.).

Asst. Pathologist.

H. Rogers, M.D., Ch.B.

Radium Officer.

Miss M. A. Bromhall, M.B., Ch.B., D.M.R.E.

Assistant Medical Officers—

P. J. Nagle, M.B., B.Ch., D.A.

R. J. Talbot, F.R.C.S. (Edin.).

Miss A. McCabe, M.D. (Dub.), M.R.C.P., D.P.H.

S. F. Smith, M.B., B.S. (Lond.).

M. Coke, M.R.C.P. (Lond.), M.R.C.S.

Mrs. E. S. Greenwood, B.A., M.D. (N.Y.),

Miss C. E. Field, M.D. (Lond.), B.S.

M.R.C.S., L.R.C.P.

J. T. Fathi, M.B., M.S. (Lond.), F.R.C.S. (Eng.).

L. C. Bousfield, M.B., B.S.

Miss E. A. Pennycuik, M.B., Ch.B.

VISITING MEDICAL STAFF.

Laryngologists.

L. G. Brown, M.D., F.R.C.S.

F. D. Cairns, F.R.C.S.

Ophthalmic Surgeon.

F. Ramsay, M.D., B.S., D.O.M.S.

Radio-therapist.

B. W. Windeyer, M.B., F.R.C.S. (Edin.).

Radiologists.

E. E. Holdsworth, M.B., Ch.B., D.M.R.E.

N. P. Henderson, M.B., Ch.B., D.M.R.E.

Electro-therapist.

P. Figdor Ashton, M.B., Ch.B.

Pathologist.

T. H. C. Benians, F.R.C.S. (Eng.).

Psychiatrist.

C. E. Roachsmith, M.R.C.S., L.R.C.P., D.P.M.

Anæsthetists.

F. P. de Caux, M.R.C.S., L.R.C.P.

J. H. T. Challis, M.R.C.S., L.R.C.P.

Dental Surgeon.

G. E. Royston, L.D.S.

NURSING STAFF.

Matron.

Miss L. F. Dykes.

Administrative sisters	..	..	..	14	Staff-nurse-midwifery pupils	..	..	24
Departmental sisters	..	..	..	8	Paying midwifery pupils	..	..	12
Ward and night sisters	..	..	..	38	Probationer nurses	..	..	214
Masseuses	..	..	..	8	Mental nurses	..	..	16
Male nurses	..	..	..	16	Assistant nurses	..	..	27
Staff nurses and staff midwives	..	..	..	70				

Steward.

D. E. Bell.

Chief Almoner.

Miss M. S. Coltart, B.A. (Oxon).

Chief Pharmacist.

Miss H. C. Martin, Ph.C.

General Observations.

In the course of 1937 the work of the Hospital continued to increase and the pressure on accommodation became so acute that the Council had to put up three temporary wards to relieve the situation somewhat. The number of admissions rose to 16,180, an average daily number of 44·3 patients. This is the highest figure for the whole metropolitan area, and ranks among the five or six highest in England. The number of operations reached practically 7,000, while the average length of stay was 23 days. The out-patient attendances, in spite of all efforts to eliminate unsuitable cases, are now well past the hundred thousand, and it is difficult to say whether the work is the more handicapped there, or in the case of in-patients, by the inadequate accommodation.

The maternity department is now one of the largest in the country : this year 1,907 mothers were delivered of 1,935 babies.

The psychiatric clinic continues to grow, so much so that it has been decided to start another session at an early date.

The emergency additional acute wards were hurriedly constructed and opened during the year. They have been named North (28 beds, male medical and radiotherapy), South (28 beds, gynaecological and radiotherapy) and John Gilpin (26 beds, infants under two), and within a week or two of this opening the situation seemed almost as bad as before—a typical indication of the grave shortage of beds. Adjustments were also made by which an additional 30 beds were obtained for maternity cases, and another ward of 30 beds for chronic cases was appropriated to the hospital.

Another long needed improvement has been the provision of lighted indicators for all departments ; these are not only useful, but also attractive in appearance.

The Almoner's department has consolidated its good beginnings and is now a centre for the training of a group of student almoners.

On 1st of May we introduced daily visiting at the hospital. Instead of the old prolonged and crowded visits on Thursday and Sunday afternoons, patients are now allowed one visitor daily for half-an-hour at 7.30 p.m., this being a time that suits the great majority of patients' relatives and can be managed by the hospital staff. On Sunday afternoon, two visitors are allowed. The scheme has been a great success, has added much to the contentment of patients, the peace of mind of their friends and, not least, to the orderliness of the day's work in the wards.

In September the Committee decided, after a year's trial, to continue the three-shift system for nurses. It was a pioneer experiment in this country and it may be said with confidence that the care of the patients has in no way suffered, the training of the nurses has retained or even improved its high standard, while the change has been very greatly appreciated by the staff itself. The scheme attracted much attention among hospital authorities and many enquiries and discussions have arisen out of other hospitals' proposals to introduce similar schemes.

The Nurses Training School had a remarkably fine record during the year .—

	<i>Entries.</i>	<i>Successes.</i>
State Examination, Preliminary	37	37
Final	51	50
Central Midwives Board	42	40
County Nurses Examination	58	58*

* Two gold medals, three silver medals, one with honours, and thirty-one with credit.

A number of changes occurred on the staff during the year. Dr. Talbot, Dr. Corea, Dr. Fletcher-Jones and Dr. Quinn finished their term of office, and Dr. Greenwood, Dr. Talbot, Dr. Smith, Mr. Fathi, and Dr. Bousfield took up duty. On account of his high qualifications in surgery, Mr. Fathi was promoted from Junior Assistant Medical Officer to Assistant Medical Officer at the end of six months' service.

Miss Spall, Assistant Matron, was appointed matron of Clare Hall Sanatorium. Miss Ardill, pharmacist, resigned, and was replaced by Mr. Carey.

By far the most notable change on the staff, however, was the retirement in December of Dr. A. W. Gregorson, Deputy Medical Superintendent. He had been on the staff of the hospital since 1911. His fine professional service as well as his personal qualities—his rugged good-humour, his mature judgment and unfaltering loyalty—had endeared him to all. It would, indeed, be difficult to over-estimate the debt of the North Middlesex Hospital to Dr. Gregorson. Mr. Kenneth Hudson, Obstetrician, who has rendered such good service on the staff for 10 years, was appointed Deputy to succeed Dr. Gregorson.

Statistical Tables for the Year ended 31st December, 1937.

Total admissions during the year .. .. .	..	..	..	..	..	..	16,180
						<i>Patients.</i>	<i>Staff.</i>
General admissions .. .. .	..	..	..	..	..	14,248	142
Births .. .. .	..	..	..	..	..	1,790	—
Remaining in hospital on 1st January, 1937 ..	..					992	3
Discharged .. .. .	..	..	..	..	..	13,827	140
Died .. .. .	..	..	..	..	..	2,115	—
Patients treated to a conclusion during the year ..	..	..	..	..	..	..	16,082
						<i>Patients.</i>	<i>Staff.</i>
Remaining in hospital on 31st December, 1937 ..	..					1,088	5

I.—TABLE SHOWING HOW THE PATIENTS TREATED TO A CONCLUSION DURING THE YEAR WERE
ORIGINALLY ADMITTED.

By order of Clerk, County Medical Officer, Director of Public Assistance, or Local Public Assistance Officer	3
By Almoner's orders	6,418
By Medical Superintendent—	
Births	1,790
Police cases (other than accidents)	44
Accidents	991
Maternity cases (emergency)	87
Other urgent cases	6,455
Transfers from institution or home—M.C.C.	84
Transfers from hospital—M.C.C.	78
Transfers from hospital or institution—other authority	132
	16,082

II.—TABLE SHOWING THE DISTRICTS TO WHICH THE PATIENTS TREATED BELONGED.

Edmonton	4,185
Enfield	3,194
Finchley	485
Hornsey	1,631
Southgate	1,133
Tottenham	3,936
Wood Green	1,317
Other districts of Middlesex	161
Essex	9
Hertfordshire	19
Other counties	12
	16,082

III.—TABLE SHOWING THE RESULTS OF TREATMENT OR THE TERMINATION,
TOGETHER WITH ANALYSES OF DEATHS IN AGE AND OTHER GROUPS.

Relieved	12,463	77·5 per cent.
Unrelieved	1,504	9·35 „
Died	2,115	13·15 „
	16,082	100·00 „

Analysis of Deaths in Age Groups.

Ages.	Male.	Female.	Totals.
Under 1 year	102	78	180
1- 2 years	12	11	23
2- 5 years	3	8	11
5-15 years	24	14	38
15-25 years	41	37	78
25-35 years	40	57	97
35-45 years	62	68	130
45-55 years	112	109	221
55-65 years	239	141	380
65-75 years	244	232	476
Over 75 years	208	273	481
	1,087	1,028	2,115

Deaths within 24 hours of admission	308 = 14·56 per cent.
„ 24 to 48 „ „ „	131 = 6·19 „
„ 48 to 72 „ „ „	105 = 4·97 „
	<hr/>
	544
All other deaths	1,571 = 74·28 „
	<hr/>
Total	2,115 = 100·00 „
	<hr/>

The 308 deaths which occurred within 24 hours of admission may be classified as follows :—

Injuries	27
Terminal stage :—	
Acute diseases	87
Chronic diseases	168
Other deaths within 24 hours	26
	<hr/>
	308
	<hr/>

IV.—TABLE SHOWING WHITHER THE 16,082 PATIENTS WERE DISCHARGED.

(a) To own, relative's or friend's home	11,650
(b) To institution or children's home—M.C.C.	215
(c) To out-patients' department	1,472
(d) To convalescent home	151
(e) To general hospital—M.C.C.	47
(f) To hospital or institution—other authority	29
(g) To acute infectious disease hospital	54
(h) To mental hospital	283
(i) To sanatorium	61
(j) To voluntary hospital	5
(k) Died	2,115
	<hr/>
	16,082
	<hr/>

V.—AVERAGES DURING THE YEAR.

Beds, average daily number occupied	1,052·4
Patients per occupied bed, average number	15·28
Admissions, average daily number	44·33
Stay, average length in days per patient	23·89
Maximum number of beds occupied = 1,080 on 25th November.	
Minimum number of beds occupied = 913 on 15th January.	

VI.—DURATION OF STAY.

Under 28 days	13,216
29-91 days	2,352
Over 91 days	514
	<hr/>
	16,082
	<hr/>

Disease or Condition.	Males.		Females.		Infants.		Totals.
	Relieved.	Unrelieved.	Relieved.	Unrelieved.	Relieved.	Unrelieved.	
Births (including 38 born before admission)	1,821
Infants with mothers	3
No disease and unsubstantiated diagnosis..	435
Diseases caused by infection—							
Cerebro-spinal fever	9
Diphtheria	4
Dysentery	5
Erysipelas	10
Measles	2
Pertussis	13
Polio-myelitis, acute	4
Scarlet fever..	7
Tetanus	2
Typhoid fever	12
Septicaemia, pyaemia, &c.	21
Influenza	94
Tuberculosis—pulmonary	271
" non-pulmonary	72
Rheumatism, chorea	139
Gonorrhoea	5
Syphilis	32
Diseases due to parasites	12
Diseases of the—							
Nervous system	216
Eye	43
Ear	313
Nose and accessory sinuses	107
Circulatory system—							
Endocarditis	17
Myocarditis	604
Valvular disease of the heart	62
Disordered action of the heart..	73
Heart, other diseases	4
Arterio-sclerosis	70
Cerebral thrombosis	329
Arteries, other diseases..	45

Disease or Condition.	Males.			Females.			Infants.			Totals.
	Relieved.	Unrelieved.	Died.	Relieved.	Unrelieved.	Died.	Relieved.	Unrelieved.	Died.	
Diseases of the—										
Circulatory system—(contd.)										
Varicose veins, phlebitis thrombosis	88
Capillaries	10
Spontaneous cerebral haemorrhage	11
Blood, spleen, lymphatics	76	4	2	158
Endocrine glands	24
Breast	1	..	..	41
Respiratory system—										
Laryngitis	2	..	..	7
Bronchitis, acute	149	1	1	245
" chronic	3	..	..	228
Bronchiectasis, asthma	10	..	1	66
Broncho-pneumonia	118	1	61	337
Lobar pneumonia	44	..	2	161
Lungs, other diseases of	4	..	1	41
Pleurisy and empyema	18	..	1	82
Digestive system—										
Teeth and gums	14	..	..	45
Lips, mouth, tongue	9	3	2	18
Tonsils	378	4	1	602
Salivary glands	3
Naso-pharynx and pharynx	2	..	..	21
Gastric ulcer (simple)	101
Perforated gastric ulcer	32
Duodenal ulcer (simple)	88
Perforated duodenal ulcer	28
Stomach and duodenum—other conditions	73	4	28	167
Appendicitis, acute	85	..	2	347
" " with local abscess	13	..	..	63
" " " peritonitis	4	..	..	19
" " " general peritonitis	16	..	1	67
" " " sub-acute or chronic	24	..	..	198
Intestinal obstruction—										
Constipation, visceroptosis, stasis, colic	35	..	..	148
Adhesions..	21
Band	3	..	..	22

[illegible]

VIII. DISEASES AND CONDITIONS TREATED TO A CONCLUSION.

(Groups arranged in order of frequency.)

				<i>Discharged.</i>	<i>Died.</i>	<i>Total.</i>
1. Pregnancy, parturition, puerperium	..	..		2,653	24	2,677
2. Diseases of the digestive system	..	..	..	2,506	148	2,654
3. Births	..	..	..	1,747	74	1,821
4. Diseases of the circulatory system	..	..		505	808	1,313
5. Injuries	..	..	..	1,088	88	1,176
6. Diseases of the respiratory system	..	..		906	261	1,167
7. Tumours and cysts	..	..	..	642	323	965
8. Diseases of the nervous system	..	..	..	696	68	764
9. Diseases caused by infection	..	..	..	524	178	702
10. Mental diseases	..	..	..	508	9	517
11. Diseases of the generative system	..	..		486	5	491
12. Diseases of areolar tissue and skin	..	..		350	12	362
13. Diseases of the organs of locomotion	..	..		318	15	333
14. Diseases of the urinary system	..	..	..	275	57	332
15. Diseases of blood, spleen and lymphatic system				149	9	158
16. Other 8 groups	..	..	..	614	36	650
Totals				13,967	2,115	16,082

Department of Surgery.

Analysis of Operations performed during the year.

Operations.	In-Patients.		Out-Patients.	Totals.
	Major.	Minor.	Minor.	
On skin and superficial structures	15	267	537	819
On arteries, veins and lymphatics	—	87	—	87
On nerves	—	9	—	9
On bones and joints	265	234	512	1,011
On muscles, tendons, bursæ and fasciæ	—	44	98	142
Amputations	26	21	—	47
On skull, brain and spine	7	—	—	7
On face	—	14	—	14
On eye	4	11	11	26
On mouth, pharynx and œsophagus	—	40	—	40
On ear, nose and throat	262	497	6	765
On thyroid, accessory glands and neck	9	22	—	31
On breast	27	32	—	59
On thorax and contents	52	46	—	98
On abdominal wall and cavity	402	12	—	414
On stomach and duodenum	100	—	—	100
On intestine, rectum and anus	689	114	—	803
On liver, gall bladder, pancreas and spleen	71	—	—	71
On kidney and urinary tract	90	203	—	293
On male generative organs	36	67	131	234
Obstetrical	31	755	—	786
On female generative organs	244	709	—	953
On infants in maternity dept.	—	171	—	171
Totals	2,330	3,355	1,295	6,980
	5,685			

On Skin and Superficial Structures (282).

This includes débridement of wounds, incision and drainage of abscesses, skin grafts, &c.

*Orthopædic Operations. (On Bones and Joints (546), on Muscles, Tendons, Bursæ and Fasciæ (44).)**On Abdominal Wall and Cavity (414) (abdominal sections, 118).*

Herniorrhaphy	284
Laparotomy	118
Others	12

On Stomach and Duodenum (100).

Gastrectomy, gastrostomy, &c.	15
For peptic ulcer	52
Gastro-enterostomy	32
Others	1

On Intestines, Rectum and Anus (803) (abdominal sections, 688).

Appendicectomy without drainage	426
Appendicectomy with drainage	177
Drainage of appendix abscess	7
Anastomosis	26
Enterostomy/colostomy	25
Others	142

On Liver, Gall-Bladder, Pancreas and Spleen (71).

On Liver	4
On Gall-bladder.. .. .	62
On spleen	5

On Kidney and Urinary Tract (293) (abdominal sections, 13).

Nephrectomy	19
Nephrotomy/nephrolithotomy	5
Others	269

On Male Generative Organs (103).

Prostatectomy	36
Others	67

On Female Generative Organs (953) (abdominal sections, 191).

Panhysterectomy	12
Total hysterectomy	28
Subtotal hysterectomy	14
Vaginal hysterectomy	—
Oöphorectomy/salpingectomy/salpingo-oöphorectomy	75
Radium insertions	67
Gillian for retroversion	26
Webster-Baldy for retroversion	2
Plastic operations on cervix and vagina	49
Various on tubes, ovaries and uterus	106
Various on vagina and vulva	36
Examinations under anæsthetic	38
Uterine curettage	490
Miscellaneous	10

Obstetrical Operations (786). (Abdominal Sections, 25.)

Surgical induction	—
Internal version	9
Application of forceps	80
Traction	27
Cæsarean section	25
Craniotomy, Perforation, Cleidectomy	6
Manual removal of placenta	22
Episiotomy and repair	29
Repair of ruptured perineum	504
Repair of vaginal lacerations	61
Miscellaneous	17
Manual delivery under anæsthetic	5
Natural forces delivery under general anæsthetic	1

Operations on Infants.

Circumcision	161
Miscellaneous	10

Maternity Department.

I. ANTE-NATAL CLINIC.

Ante-natal sessions held	..	..	..	..	..	..	156
Cases examined	..	..	..	..	..	..	2,558
Total attendances	..	..	..	..	..	..	10,812
Average number seen per session	..	..	..	..	..	..	69.3
Average number of attendances per patient	..	..	..	..	..	..	4.05
Women referred for dental treatment	..	..	..	..	..	..	282

II. STATISTICAL TABLES AND ANALYSES OF CONFINEMENTS.

Analysis of the 1,907 Women delivered of 1,935 Infants.

						Per cent.
Mother admitted	..	Via ante-natal clinic	..	..	1,760	92·3
		As an emergency case	..	..	147	7·7
		Total	..	..	1,907	100·0
Civil state	..	Married	..	..	1,779	93·3
		Unmarried	..	..	128	6·7
		Total	..	..	1,907	100·0
Parous state	..	Primipara	..	..	1,115	58·47
		Multipara	..	..	792	41·53
		Total	..	..	1,907	100·00
Presentation	..	Vertex—occipito-anterior	..	..	1,756	
		„ —occipito-posterior	..	..	53	
		Breech—uncomplicated	..	..	64	
		Breech—complicated	..	..	11	
		Face	..	..	8	
		Transverse	..	..	3	
		Born before admission	..	..	40	
		Total	..	..	1,935	

Induction of Labour.

Medical induction 170

Method of delivery of the 1,935 infants born.

Method of Delivery.	No. of Births.	Deaths.		
		Maternal.	Foetal.	Neo-natal.
Natural forces	1,599	11	44	49
Natural forces after induction	174	—	11	8
Forceps	86	4	10	6
Forceps after induction	5	—	—	—
Cleidotomy	1	—	1	—
Internal version	7	—	3	—
" " and leg traction	3	—	2	—
Scalp traction	17	—	7	3
Leg traction	15	—	12	1
Cæsarean section	21	1	2	2
Cæsarean section after induction	1	—	—	—
Perforation—craniotomy	5	—	5	—
Combined cephalic version	1	—	—	—
Totals	1,935	16	97	69

Delivered by midwives 1,743 women.
Delivered by obstetricians 124 „
Delivered before admission 40 „

Total 1,907 „

Midwives sought medical assistance for 834 women.

Labour—		Per cent.	
Normal	1,728	90·62	
Abnormal	153	8·02	
Multiple	26	1·36	
Total	1,907	100	

Maternal Mortality.

Seventeen maternal deaths occurred ; particulars of these are as follows :—

- (1) Single, aged 30, 2nd pregnancy ; had attended the ante-natal clinic. She developed broncho-pneumonia at home, and was admitted to hospital in a moribund state, one hour after her premature delivery. She died within twelve hours.
- (2) Aged 33, 1st pregnancy. She was admitted as an emergency case in labour, suffering from eclampsia. Forceps delivery was necessary because of a persistent occipito-posterior position. She had no further fits after admission, but died next day from cardiac failure.
- (3) Aged 26, primipara ; attended her own doctor. She was admitted to hospital as an emergency case, 32 weeks pregnant and suffering from eclampsia. She had had two fits before admission, and had two fits afterwards. Membranes were ruptured on the day of admission to induce labour, and she was delivered of a premature stillborn child. She died early next day.
- (4) Aged 16½, primipara ; attended the ante-natal clinic from the 28th week, no abnormality being detected. She was admitted in labour with a blood pressure of 128/92, but no albuminuria. She was delivered of a living child the next day, and then developed post-partum eclampsia, having three fits in succession. She died of cardiac failure six hours after admission.
- (5) Aged 29, 1st pregnancy. She was admitted as an emergency, suffering from eclampsia, having had many fits before admission. She died undelivered eight hours later.
- (6) Aged 36, primipara ; 37 weeks pregnant ; was admitted as an emergency, suffering from toxæmia of pregnancy. She was delivered of a living child on the day of admission. She developed puerperal insanity fourteen days later, and died of broncho-pneumonia.
- (7) Aged 36, second pregnancy, the first being a miscarriage four years before. She was admitted to hospital as an emergency, suffering from post-partum hæmorrhage and retained placenta. Manual removal of placenta was performed and intravenous gum saline given. The patient suddenly collapsed and died two hours later.
- (8) Aged 28, primipara, attended no clinic. She was admitted to hospital in labour. Normal delivery took place on the same day. Pyrexia developed on the third day, when a diagnosis of advanced pulmonary tuberculosis was made. Her death occurred in a medical ward from pulmonary tuberculosis ten weeks later.
- (9) Aged 26, primipara, attended the ante-natal clinic, and her pregnancy was normal. She was admitted in labour. Low forceps delivery of a living full-time child was followed by post-partum hæmorrhage and retained placenta, necessitating manual removal. The patient died an hour and a-half later from shock and hæmorrhage.
- (10) Aged 29, third pregnancy, had attended the ante-natal clinic. She was admitted to hospital suffering from toxæmia of pregnancy, albuminuria and œdema of the feet. Spontaneous delivery of a living child was followed by post-partum hæmorrhage, due to retained placenta. A blood transfusion was given and the placenta expressed. The patient collapsed suddenly and died nine hours later.
- (11) Aged 44, eighth pregnancy ; was admitted as an emergency, suffering from bronchitis and premature death of foetus in utero. She was instrumentally delivered two days later of a stillborn child, and had manual removal of placenta. She developed broncho-pneumonia and died six days later.
- (12) Aged 30, fourth pregnancy ; was admitted to the maternity department from the clinic at 28 weeks, suffering from toxæmia complicating multiple pregnancy. The toxæmia improved, and the patient was delivered of premature stillborn triplets three days later. She became acutely maniacal a few hours after delivery, and died from exhaustion seven hours later.
- (13) Aged 42, thirteenth pregnancy. She was admitted to hospital as an emergency case, suffering from severe shock and anæmia, due to retained placenta. Manual removal of placenta was performed, and an intravenous gum saline given. Death occurred six hours after admission.
- (14) Aged 45, ninth pregnancy ; attended the ante-natal clinic, and twins were diagnosed early in pregnancy. She was admitted to hospital, suffering from toxæmia. Six days later she was delivered of the second twin, 24 hours after the first, after a long labour due to inertia. Manual removal of placenta was performed three hours later for post-partum hæmorrhage, and was followed by intravenous saline and blood transfusion. The patient did not respond to treatment, and died eight hours later. Both children were full time and lived.
- (15) Aged 25, primipara ; was admitted to hospital as an emergency, 31 weeks pregnant and suffering from acute pyelonephritis. She was transferred to the maternity department in labour, and was delivered spontaneously of a 34 weeks' premature child, which survived. The mother died four days later from bilateral pyelonephritis and toxæmia.
- (16) Aged 47, fifth pregnancy ; was admitted from the ante-natal clinic at term, suffering from mild toxæmia. She was instrumentally delivered of a living child four days later, on account of delay due to a secondary face presentation. The puerperium was complicated by pyelitis, from which a complete recovery was made. The patient collapsed suddenly and died from a pulmonary embolus on the 16th day of the puerperium, after having been up two or three days.
- (17) Aged 37, primipara ; was admitted in labour from the ante-natal clinic at full term. She was delivered by Cesarean section on account of primary inertia. She developed paralytic ileus, for which an ileostomy was performed six days later. There was no improvement in her condition, and she died three hours afterwards.

Rate—8·9 per thousand.

Puerperal Pyrexia.

Sixty-nine cases of puerperal pyrexia occurred, of which an analysis is as follows.—

Mode of Delivery.			Cause of Pyrexia.					
Natural forces	..	..	Pyelitis	..	..	..	..	12
			Pulmonary tuberculosis			..	..	1
			Puerperal endometritis	..		..	..	3
			Perineal sepsis	..	..	..	..	1
			Vaginal sepsis	..	..	..	..	2
			Pulmonary embolism	..		..	..	1
			Mastitis	..	..	..	..	17
			Secondary anæmia		..	..	..	1
			Bronchitis		..	..	..	1
			Influenza		..	..	..	2
			Constipation		..	..	..	1
			Unknown		..	..	..	2
Forceps	..	..	Puerperal endometritis	..		..	2	
			Perineal sepsis	..	..	..	4	
			Vaginal sepsis	..	..	..	1	
			Mastitis	..	..	..	1	
			Subinvolution	..	..	..	1	
			Pyelitis	..	..	..	5	
			Phlegmasia alba dolens			..	..	1
Internal version	..	..	Puerperal endometritis	..		..	1	
			Perineal sepsis	..	..	..	1	
Cæsarean section	..	..	Puerperal endometritis	..		..	2	
			Mastitis	..	..	..	2	
			Pyelitis	..	..	..	4	
			Total		..	..	69	

Births.

							Per cent.
Full term	..	..	..	..	..	1,547	79·94
Premature	..	..	..	..	..	379	19·59
Postmature	..	..	..	..	..	9	·47
Total births			..	..	..	1,935	100·00
							Per cent.
Breast-fed	..	..	..	..	..	1,731	96·55
Complementary and artificially fed	..	..	..	..	..	62	3·45
Total			..	..	..	1,793	100·00

Infant Mortality.

Infants—							Per cent.
Born and lived	..	..	..	..	..	1,769	91·42
Born and died	..	..	..	..	..	69	3·57
Still-born	..	..	..	..	..	97	5·01
Total			..	..	..	1,935	100·00

Details of 97 Stillbirths.

No. of Infants.	Delivered by	Causation.	Mother.		Infant.	
			Primi- para.	Multi- para.	Full term.	Pre- mature.
55	Natural forces	Prematurity	—	2	—	2
		Maternal toxæmia	11	7	7	11
		Maternal nephritis	1	—	—	1
		Eclampsia... ..	1	1	—	2
		Accidental hæmorrhage	1	5	2	4
		Placenta prævia	1	1	—	2
		Difficult labour	1	—	1	—
		Cord round child's neck	—	1	1	—
		Prolapsed cord	—	2	2	—
		Intracranial hæmorrhage	—	1	1	—
		Anencephaly	2	3	2	3
		Spina bifida	—	1	1	—
		Unknown	9	3	11	1
		Inattention at birth	—	1	—	1
10	Forceps	Maternal toxæmia	4	1	5	—
		Prolapsed cord	1	—	1	—
		Difficult labour	2	1	3	—
3	Internal version	Unknown	—	1	1	—
		Difficult labour	—	1	1	—
		Prolapsed cord	—	1	1	—
2	Internal version and leg traction	Unknown	—	1	—	1
		Prematurity	1	—	—	1
		Difficult labour	1	—	1	—
12	Leg traction	Placenta prævia	5	6	6	5
		Prolapsed cord	1	—	1	—
7	Scalp traction	Difficult labour	1	—	1	—
		Placenta prævia	—	6	2	4
5	Perforation—craniotomy	Hydrocephalus	1	2	3	—
		Obstructed labour	2	—	2	—
1	Cleidotomy	Hydrocephalus	1	—	1	—
2	Cæsarean section	Difficult labour	2	—	2	—
			49	48	49	38
			97		97	

Summary of Cause of Stillbirths.

Foetal—							Per cent.	
Hydrocephalus	..	..	..	..	..	4		
Anencephaly	..	..	..	..	..	5		
Spina bifida	..	..	..	..	..	1		
							— 10	10·3
Maternal—								
Toxæmia	..	..	..	..	..	23		
Accidental hæmorrhage	..	..	..	..	..	6		
Placenta prævia	..	..	..	..	..	19		
Prematurity	..	..	..	..	..	3		
Eclampsia	..	..	..	..	..	2		
Maternal nephritis	..	..	..	..	..	1		
							— 54	55·67
Labour—								
Prolapsed cord	..	..	..	..	..	5		
Intracranial hæmorrhage	..	..	..	..	..	1		
Cord round child's neck	..	..	..	..	..	1		
Difficult labour	..	..	..	..	..	11		
Inattention at birth	..	..	..	..	..	1		
							— 19	19·59
Unknown	..	..	..	..	..	14	14	14·43
Total							97	
							—	

Details of 69 Neo-natal Deaths.

No. of Infants.	Delivered by	Maternal Complication.	Cause of Death.	Age.
8	Natural forces ...	Nil ...	Prematurity ...	1 day or less.
6	" " ...	Multiple pregnancy ...	" " " "	1 "
2	" " ...	Nil ...	" " " "	3 days.
1	" " ...	" " " "	" " " "	2 "
1	" " ...	Toxæmia ...	" " " "	3 "
1	" " ...	Nil ...	" " " "	6 "
1	" " ...	" " " "	" " " "	9 "
1	" " ...	Multiple pregnancy ...	" " " "	8 "
1	" " ...	" " " "	" " " "	10 "
3	" " ...	Nil ...	Intracranial hæmorrhage ...	2 "
2	" " ...	" " " "	" " " "	4 "
2	" " ...	" " " "	" " " "	5 "
2	" " ...	" " " "	" " " "	6 "
1	" " ...	Cardiac ...	Gastro-enteritis ...	20 "
1	" " ...	Toxæmia ...	" " " "	5 "
1	" " ...	" " " "	" " " "	15 "
1	" " ...	Nil ...	" " " "	18 "
1	" " ...	" " " "	" " " "	24 "
1	" " ...	" " " "	" " " "	27 "
1	" " ...	" " " "	Broncho-pneumonia ...	3 "
1	" " ...	" " " "	" " " "	5 "
1	" " ...	Pulmonary tuberculosis ...	" " " "	13 "
2	" " ...	Nil ...	" " " "	6 "
1	" " ...	" " " "	" " " "	10 "
1	" " ...	" " " "	" " " "	13 "
1	" " ...	" " " "	" " " "	20 "
1	" " ...	" " " "	Pneumonia ...	1 day.
1	" " ...	" " " "	" " " "	1 "
1	" " ...	Toxæmia ...	Asphyxia ...	1 "
1	" " ...	Nil ...	Spina bifida ...	19 days.
1	" " ...	" " " "	" " " "	3 "
1	" " ...	Toxæmia ...	" " " "	1 day.
1	" " ...	Nil ...	Cervical adenitis ...	26 days.
1	" " ...	Toxæmia ...	{ Hæmorrhagic disease of the	5 "
1	" " ...	Nil ...	newborn ...	16 "
1	" " ...	" " " "	Atelectasis ...	4 "
1	" " ...	" " " "	Encephalocele ...	2 "
1	" " ...	" " " "	Unknown ...	11 "
1	Forceps ...	" " " "	Prematurity ...	1 day or less.
1	" " ...	Toxæmia ...	" " " "	1 day or less.
1	" " ...	Chronic nephritis ...	" " " "	1 "
1	" " ...	Multiple pregnancy ...	" " " "	5 days.
1	" " ...	" " " "	" " " "	14 "
1	" " ...	Toxæmia ...	Intracranial hæmorrhage ...	1 day or less.
1	" " ...	Pyelitis ...	" " " "	1 "
1	" " ...	Broncho-pneumonia ...	Broncho-pneumonia ...	1 "
1	" " ...	Nil ...	" " " "	5 days.
1	" " ...	" " " "	Asphyxia ...	1 day or less.
1	Cæsarean section ...	" " " "	Intracranial hæmorrhage ...	6 days.
1	" " ...	" " " "	Broncho-pneumonia ...	2 "

Summary of Neo-natal Deaths.

Prematurity	27
Broncho-pneumonia	11
Intracranial hæmorrhage	12
Asphyxia	2
Atelectasis	1
Encephalocele	1
Spina bifida	3
Hæmorrhagic disease of the newborn	2
Pneumonia	2
Gastro-enteritis	6
Cervical adenitis	1
Unknown	1
Total	69

Analysis of Cases of Normal and Abnormal Pregnancy, Parturition and Puerperium Treated to a Conclusion in Maternity and other Wards during the year.

	Discharged.	Died.	Total.
Pregnancy	13	—	13
Pregnancy and spurious labour pains	233	—	233
Toxæmia of pregnancy (admitted as such)	5	1	6
Ectopic gestation	18	—	18
Abnormal condition of gravid uterus	7	—	7
Placenta prævia (admitted as such)	1	—	1
Pregnancy—			
Pregnancy and concomitant disease	53	3	56
Abortion—			
Threatened	31	—	31
Complete	17	—	17
Incomplete	359	1	360
Missed	9	—	9
With pelvic infection	7	—	7
Labour—			
Normal	1,316	2	1,318
Normal with toxæmia	293	2	295
Normal and concomitant disease	48	2	50
Abnormal	125	5	130
Abnormal and toxæmia of pregnancy	30	1	31
Abnormal and concomitant disease	5	—	5
Multiple	25	1	26
Puerperium—			
Normal (admitted as such)	35	—	35
Puerperal toxæmia (admitted as such)	2	3	5
Puerperium and concomitant disease	7	3	10
Retained products of conception (admitted as such)	1	—	1
Puerperal infections—			
Mental disorders associated with childbirth	6	—	6
Affections connected with pregnancy	7	—	7
Totals	2,653	24	2,677

Anæsthetics

Analysis of Anæsthetics Administered.

General.	Total.
Chloroform, ether or mixture	43
Ethyl chloride and ether	590
Gas and oxygen	1,488
Gas, oxygen and ether	1,520
Evipan	66
Cyclopropane	15
Vinesthene	32
Pentothal	4
	3,758
Local.	
Freezing with ethyl chloride	36
Infiltration	809
	845
Spinal.	
Decicain	128
Durocain	1
Percain	24
Stovain	138
Unclassified	95
	386
Totals	4,989

Out-Patient Department.

Total number of patients seen	..	..	..	..	..	18,632
Total number of attendances	..	..	..	..	..	105,899
Number transferred from wards	..	..	..	..	..	1,472

Department of Ophthalmology.

Total number of out-patient attendances	..	..	..	..	..	5,279
Refractions	..	..	..	..	..	750
<i>Operations—(25)</i>						
Tenotomy	..	..	..	..	..	3
Extraction of cataract	..	..	..	..	..	7
„ „ lens	..	..	..	..	..	2
Enucleation	..	..	..	..	..	3
Evisceration	..	..	..	..	..	2
Iridectomy	..	..	..	..	..	4
Removal foreign body	..	..	..	..	..	1
Probing	..	..	..	..	..	3

Ear, Nose and Throat Department.

Analysis of Operations.

Removal of tonsils and adenoids by guillotine	..	..	..	..	..	374
Removal of tonsils and adenoids by dissection	..	..	..	..	..	122
Submucous resection and dissection of tonsils	..	..	..	..	..	4
Submucous resection	..	..	..	..	..	25
Antrostomy	..	..	..	..	..	15
Mastoidectomy	..	..	..	..	..	19
Ethmoidectomy	..	..	..	..	..	8
Bronchoscopy	..	..	..	..	..	36
Œsophagoscopy	..	..	..	..	..	5
Removal of aural polypi	..	..	..	..	..	6
Removal of nasal polypi	..	..	..	..	..	3
Toti's operation	..	..	..	..	..	1
Turbinectomy	..	..	..	..	..	6
Myringotomy	..	..	..	..	..	4
Removal foreign body from nose	..	..	..	..	..	1
Frontal sinus operation	..	..	..	..	..	1
						<hr/> 630 <hr/>

Dental Department.

Number of patients treated	..	..	..	..	..	2,036
Number of general anæsthetics administered	..	..	..	..	..	1,080
Number of extractions	..	..	..	..	..	6,150
Ante-natal cases treated	..	..	..	..	..	297

Physio-Therapeutic Department.

I. <i>Massage and Electro-therapy</i> —						<i>Number. Treatments.</i>	
In-patients	.	..	..	..	..	325	6,616
Out-patients	.	..	..	..	..	1,848	56,862
						<hr/> 2,173	<hr/> 63,478
						<hr/>	<hr/>
II. <i>Actino-therapy</i> —							
In-patients	..	..	..	..	..	104	1,904
Out-patients	..	..	..	..	..	618	23,039
						<hr/> 722	<hr/> 24,943
						<hr/>	<hr/>
Grand totals						2,895	87,421
						<hr/>	<hr/>

Dispensary.

Number of prescriptions dispensed—

In-patients 117,260

Out-patients—

Number of patients 18,156—

Number of prescriptions 24,311

Total.. .. . 141,571

Pathological Department.
Classification of Examinations made during the Year.

Specimens from County Hospitals.	Hæmatology.										Serology.							General and Microscopic.						Histology		Autopsy.			
	Full count.	Red cells and hæmoglobin.	White cell count and differential.	Reticulocyte count.	Platelet count.	Red cell fragility.	Bleeding time.	Coagulation time.	Sedimentation test.	Other tests.	Blood grouping.	Blood compatibility.	Widal reaction. Whole group.	Bacterial agglutination.	Complement fixation test.	Wassermann reaction blood.	Wassermann reaction, C.S.F.	Kahn's.	Urine.	Fæces.	Cerebrospinal fluid.	Exudates and other fluids.	Parasitic infections.	Other examinations.	Surgical.	Post-mortem.	Hospital cases.	Others, still-birth (B.I.D.).	Autopsy rate per cent.
North Middlesex ..	387	159	373	4	9	6	2	7	111	1	604	275	116	22	28	773	56	—	2,904	38	250	163	26	2	471	332	639	115	—
Redhill ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	25	161	16	3	—	2	—	—	—	—	138	70	—	—	—
Totals ..	387	159	373	4	9	6	2	7	111	1	604	275	116	22	53	934	72	3	2,904	40	250	163	26	2	609	402	639	115	38·86

Biochemistry.

Bacteriology.

Specimens from County Hospitals.	Blood.														Cerebrospinal fluid.						Urine.						Fæces.		Stomach contents						
	Sugar.							Sugar tolerance curve.	Urea.	Calcium.	Cholesterol.	Van den Bergh.	Other tests.	Protein.	Globulin.	Chloride.	Sugar.	Urea.	Lange's test.	Sugar estimation.	Urea concentration.	p.H.	Single Urea.	Nature of reducing substances.	Other tests.	Occult blood.	Fats.	Test meals (fractional).							
	Sugar.	Sugar tolerance curve.	Urea.	Calcium.	Cholesterol.	Van den Bergh.	Other tests.																												
North Middlesex	103	129	2,897	120	163	321	1,578	29	742	29	41	9	17	195	22	875	6	1	16	6	138	168	165	13	11	22	45	25	227	134	40	7	515	—	163
Central Middlesex	—	—	—	—	—	—	—	—	—	—	—	—	38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Redhill	—	—	—	3	—	—	—	—	2	—	—	—	5	1	—	5	—	—	—	—	7	—	—	—	—	—	—	—	—	1	—	—	—	—	
Clare Hall Sanatorium	—	—	—	—	1	1	166	196	—	—	—	—	66	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Totals ..	103	129	2,897	123	164	322	1,744	225	744	29	41	9	126	196	22	880	6	1	16	6	138	165	168	13	11	29	45	25	227	135	40	7	515	—	163

Totals	..	{ North				16,845	
		{ Central					
		{ Redhill					
		{ Clare Hall Sanatorium					
						Grand total ..	17,752.

Department of Radiology.

X-ray Investigations.

Number of in-patients	..	..	..	..	..	..	3,834
Number of out-patients	..	..	..	..	..	..	3,733
Number of staff	..	..	..	..	..	..	669
Total	..	..	..	..	..	..	8,236

Total number of examinations—12,212.

The following are important groups where total figures are a valuable index of the work of the department :—

	Patients.						Staff.
Standard chests	3,262	530
Chests taken in ward	196	3
Bronchography	65	1
Opaque meals	971	11
Opaque enemas	161	—
Cholecystography	209	9
Pyelography—							
(a) Intravenous	115	2
(b) Ascending	26	—
Gaseous distribution (acute obstructions)				46	—
Uterine lipiodol	24	—
Electrocardiograms	159	—

Superficial Therapy.

Number of patients	..	..	..	..	9
Number of treatments	..	..	..	..	28

Ringworm Treatment by X-rays.

Number of patients	..	..	..	..	13
Number of attendances..	..	..	..	..	26

Deep X-ray Therapy.

During the year 215 new patients were treated in the department, the treatments they received totalling 4,030.

In addition there were 42 patients continuing treatment from 1936 ; these had 614 treatments ; 7 patients from 1935 who had 63 treatments ; 2 patients from 1934 who had 33 treatments ; one patient from 1933 who had 20 treatments ; one from 1931 who had 2 treatments and one from 1930 who had one treatment.

Below is a detailed list of new cases treated during 1937 :—

Carcinoma cervix uteri after radium treatment	...	...	...	...	...	28
" " " (no radium treatment)	...	...	...	...	...	9
" " " post-operative	...	...	...	...	...	1
" " " recurrence in vagina	...	...	...	...	...	6
" " " " bone	...	...	...	...	...	1
" body of uterus (post-operative)	...	...	...	...	...	4
Malignant cervical polyp...	...	...	...	...	...	1
Carcinoma vulva	...	...	...	...	...	1
" ovary (post-operative)	...	...	...	...	...	8
Pelvic mass	...	...	...	...	...	1
Endometrioma in pouch of Douglas (post-operative)...	...	...	...	...	...	1
Carcinoma of lip	...	...	...	...	...	1
" " secondary glands	...	...	...	...	...	1
" tongue and floor of mouth	...	...	...	...	...	8
" " " " with recurrent glands	...	...	...	...	...	1
" tonsil and pharynx	...	...	...	...	...	4
" oesophagus	...	...	...	...	...	2
" stomach	...	...	...	...	...	4
" colon	...	...	...	...	...	5
" rectum	...	...	...	...	...	4
" anus	...	...	...	...	...	1
" kidney	...	...	...	...	...	1
Hypernephroma	...	...	...	...	...	1
Carcinoma bladder	...	...	...	...	...	4
" urethra with secondary glands	...	...	...	...	...	1
" prostate	...	...	...	...	...	6
" penis with glands	...	...	...	...	...	1
" lung	...	...	...	...	...	6
" bronchus	...	...	...	...	...	10
Mediastinal tumour	...	...	...	...	...	1
Carcinoma of breast (inoperable)	...	...	...	...	...	13
" " (post-operative)	...	...	...	...	...	22
" " secondaries in bone	...	...	...	...	...	5
" " recurrence in glands or skin	...	...	...	...	...	3
" maxillary antrum	...	...	...	...	...	3
" nasopharynx	...	...	...	...	...	1
" larynx	...	...	...	...	...	2

Neoplasm in chiasmal region	3
Carcinoma of thyroid	2
Rodent ulcer axilla	1
Glands in neck, no primary found	3
Glands in axilla, no primary found	1
Epithelioma of skin	1
„ „ glands secondary to	2
<i>Sarcomata—</i>	
Osteoclastoma of humerus	1
Lymphosarcoma of neck	1
Sarcoma of thigh	1
„ of femur (Old Paget's disease)	1
„ skull	1
Mass in R.i.F.	2
Retroperitoneal sarcoma	1
Lymphosarcoma groin	1
Sarcoma body of uterus (post-operative)	2
Multiple myelomatosis	1
Pseudo-myxoma peritonei	1
Sarcoma small intestine	1
<i>Blood dyscrasias—</i>	
Lymphatic leukæmia	3
Myelogenous leukæmia	1
Hodgkin's disease (generalised)	1
„ „ of breast	1
„ „ recurrence in bone	1
<i>Non-malignant—</i>	
Endometritis	1
Fibrocystic disease humerus	2
Traumatic hæmatomyelia	1
Staph. infection of lip and chin	1
Hyperthyroidism	1
Leukoplakia vulvæ	3
Total	215

Radium Department.

Number of new cases seen during the year 123

Condition treated.	Total cases treated.	Alive.	Died within 1 year.
I.—Carcinoma : gynæcological—			
Cervix uteri Stage I	10	10	—
„ Stage II	4	3	1
„ Stage III	8	5	3
„ Stage IV	3	2	1
Recurrence after hysterectomy	1	1	—
Carcinoma body of uterus.. ..	4	3	1
II.—Carcinoma : tongue and mouth—			
Tongue	4	2	2
Floor of mouth	1	—	1
Alveolus	1	1	—
Lip	7	7	—
III.—Carcinoma : breast, &c.—			
Breast { after operation	2	2	—
„ { secondary nodules	2	2	—
„ { no operation	1	1	—
IV.—Carcinoma : rectum			
„ penis	2	1	1
V.—General—			
Skin, squamous	4	4	—
Skin, basal-celled	24	23	1
Epulis	1	1	—
Leukoplakia	1	1	—
Malignant glands of neck	1	1	—
Malignant nævus	1	1	—
Total malignant	86	75	11
Non-malignant—			
Nævi	6	6	—
Keloid	10	10	—
Endometritis.. ..	6	6	—
Wart	12	12	—
Angioma, etc.	3	3	—
Total non-malignant	37	37	—
Grand totals	123	112	11

Psychiatric Clinic.

During the year, 196 new patients were seen, including 13 “ follow-ups ” from Napsbury and 30 ward consultations. The total attendances amounted to 729.

The new cases consisted of .—

- 70 neuroses and psychoneuroses ;
- 74 psychoses ;
- 5 epileptics ;
- 11 mental defectives ;
- 6 organic nervous diseases, including two patients with Huntington’s Chorea ;
- 30 patients with miscellaneous disorders.

-
- 48 patients were advised to become voluntary boarders at Napsbury, the majority of whom were admitted.
 - 21 patients were recommended for admission to the observation wards of the North Middlesex County Hospital.

Mental Patients.

Return for the Year ended 31st December, 1937.

	Males.	Females.	Children.	Total.
Remaining in Hospital, 31st Dec., 1936 ..	4	12	—	16
Admitted	195	308	2	505
Discharged	92	131	—	223
Transferred to mental hospitals	103	178	2	283
Died	2	6	—	8
Remaining in Hospital, 31st Dec., 1937 ..	2	5	—	7

Percentage sent to mental hospitals :—males, 51·7 per cent. ; females, 55·9 per cent.

ANNUAL REPORT OF THE MEDICAL SUPERINTENDENT ON THE WORK OF
REDHILL COUNTY HOSPITAL FOR THE YEAR 1937.

Staff.

WHOLE-TIME MEDICAL STAFF.

Medical Superintendent—

J. N. Deacon, M.C., M.B., B.S.

Deputy Medical Superintendent—

J. H. Attwood, M.B., B.S., D.A.

Physician—

(*Vacant*)

R. W. D. Turner, M.A., M.D., M.R.C.P.

(*locum tenens*)

Surgeon—

D. B. Craig, F.R.C.S., D.L.O.

Obstetric Surgeon—

E. ap I. Rosser, M.B., B.S., M.C.O.G.

Assistant Pathologist—

J. L. Hamilton-Paterson, M.D., B.S.

Assistant Medical Officer—

J. A. Carson, M.D., Ch.B.

Casualty Officer—

L. R. Robson, M.B., Ch.B.

VISITING MEDICAL STAFF.

Surgeon—

R. Trevor Jones, B.Sc., M.B., B.S., F.R.C.S.

Radiologist—

G. Simon, M.B., B.Chir.(Cantab.), D.M.R.E.

Pathologist—

T. H. C. Benians, F.R.C.S.

Dental Surgeon—

J. A. Hudson, H.D.D., L.D.S.

NURSING—(125).

Matron—Miss E. R. Wheeldon.

Administrative Sisters	..	..	5	Nurses and Probationers (48)	..	101
Departmental Sisters	..	..	3	Massage Sister	..	1
Ward and Night Sisters	..	..	11	Masseuses	..	3

OTHER STAFF.

(*Non-Resident.*)

Chaplain	..	..	..	..	Rev. C. E. de R. Copinger.
Steward	..	..	..	..	Mr. J. Fielding, A.R.S.I.
Pharmacist	..	..	..	..	Miss W. N. Knight, M.P.S.
Chief Assistant Dispenser and Biochemist	..	..	..	..	Miss E. Johnson, Ph.C., M.P.S.
Radiographer	..	..	..	..	Miss B. V. Poole, M.S.R.
Almoner	..	..	..	..	Mrs F. G. Owen, A.I.H.A.

Staff.

During the course of the year several additional appointments were made. Dr. J. L. Hamilton-Paterson was appointed Assistant Pathologist; Dr. L. R. Robson, Casualty Officer; Miss J. Allen, Assistant Dispenser; Miss M. Guy, Assistant Radiographer, and Miss J. Hutt, Assistant Sister-Tutor. In August Dr. J. A. Carson was promoted Assistant Medical Officer.

The Nurses' Training School had the following academic successes :—

	Passed.	Failed.
County Nurses Examination	10	1
State Examination—Preliminary	6	—
" " —Final	12	—
Certificate of Central Midwives Board	17	—

In the County Nurses Examination two nurses gained distinctions, one in the theory of nursing and the other in practical nursing.

General Observations.

In April the facilities for the visiting of patients were extended, two evening sessions each of 45 minutes being instituted.

Once again we extend our thanks to the Commandants and members of the Stanmore and Mill Hill detachments of the Middlesex County Branch of the British Red Cross Society, who have attended here regularly throughout the year on four days a week.

We are also greatly indebted to Mrs. Tate, Miss Dumbleton and Miss Moore for the excellent library service which they have provided.

During the year the Mill Hill Rotary Club offered to provide the service of free transport of patients to their homes, the service to be available only to those patients unable to afford private conveyances. The offer was gladly accepted and the service has been found to be of great value.

Work of the Hospital.

In 1937 the number of in-patients treated to a conclusion, at 4,939, is a record for the hospital. Of these, 24 per cent. were entirely medical and 76 per cent. were surgical and obstetric. The case mortality rates of these two groups and of the total number treated were 10·1 per cent., 3·1 per cent. and 4·9 per cent. respectively. All rates show decreases and the last is the lowest since the opening of the hospital in 1927.

The average daily number of beds unavailable by reason of repairs, infection and occupation by sick staff at 0·7 is the lowest for all time. It is due to the fact that it was unnecessary to close any wards for re-decoration or quarantine.

The average daily number of occupied beds is 206·4 and the average daily percentage of available beds occupied is 93·5. The average length of stay per patient is 15·3 days and the lowest ever.

The work of the Out-Patient Department increased appreciably, 12,363 patients being seen. This number is exceeded at only one other of our County Hospitals. The majority of patients were referred by medical practitioners for a specialist's opinion and/or some special investigation or form of treatment. Attendances average 3·6 per patient. It is of interest to note that entirely medical out-patients constituted only 6 per cent. of the whole, an indication that the "bottle and jug" conditions found at so many hospitals do not prevail here.

Major and minor operations performed on, and general anæsthetics given to in-patients and out-patients total 5,654 and 2,718 respectively. Both figures show increases.

Whilst the number of in-patients investigated in the radiological department shows little change, that of out-patients is increased by 50 per cent. and is double the former. Of all investigations made in the department, 48 per cent. were in connection with cases of injury.

The Traumatic Clinic, to which all cases of trauma, other than those of slight degree, are sent, is well established in the charge of Mr. Craig. It ensures continuity of treatment, efficient after-care and unity of control. The number of fracture and dislocation cases treated as in-patients and that of persons treated entirely as out-patients together total 717.

As the demand for maternity beds was greater than ever and the accommodation in the department remained unchanged, preferential admission was given to an even greater proportion of abnormal cases, the total number of confinements remaining practically unchanged. Of every five women delivered two had some abnormality during pregnancy and/or labour. The rises in the forceps rate from 4·8 per cent. to 10·1 per cent., in the number of Caesarean sections from 15 to 25 and in the maternal morbidity rate of booked cases from 15·1 to 19·5 per 1,000 women delivered, are thus explained.

The use of Mr. Rosser's resuscitation table and the application of improved methods of treating asphyxia and shock in the new-born infant have resulted in an appreciable fall in the neo-natal death rate (death within four weeks) from 4·9 per cent. to 2·5 per cent. The death rate of immature infants has fallen from 19·3 per cent. to 16·9 per cent. It is not yet possible to say whether this fall is due to the administration of Oestrin to immature infants.

Consequent upon the appointment of a full-time Assistant Pathologist the amount of pathological work sent to other hospitals has decreased. The work of the Pathological Department has increased by 25 per cent.

Classification of Beds.

	Male.	Female.	Children.	Total.
Medical	33	31	19	83
Surgical	34	34	12	80
Maternity	—	21	20	41
Ear, Nose and Throat	5	8	6	19
Sick Nurses	—	2	—	2
Totals	72	96	57	225

Beds—average daily number available	224·3
Beds—average daily number occupied	207·7
Average daily percentage of available beds occupied	93·5
Patients per occupied bed—average number per annum	23·77
*Nursing Staff—average daily complement	119·4
Occupied beds per nurse—average number	1·73
Maximum number of beds occupied	226 on 31st December.
Minimum number of beds occupied	183 on 1st August.

* Includes Matron, 21 sisters and nurses not employed in the wards, and 4 masseuses (total, 26).

STATISTICAL TABLES AND ANALYSES.

Remaining in hospital, 1st January, 1937	..	..	205	
Admitted	..	..	..	4,438
Born in hospital	..	..	..	522
				—
Discharged	..	..	..	4,699
Died	..	..	..	240
Patients treated to a conclusion during the year	..			4,939
Remaining in hospital on 31st December, 1937	..			226

CLASSIFICATION OF PATIENTS TREATED TO A CONCLUSION.

Male infants under 3	..	..	..	..	581	
Boys, 3-16	..	..	..	..	487	
Men	..	..	..	..	1,088	
					—	2,156
Female infants under 3	..	..	..	..	395	
Girls, 3-16	..	..	..	..	358	
Women	..	..	..	..	2,030	
					—	2,783
						—
Total..	..	..	..	..		4,939
						—

Children under 16 constituted 36·8 per cent. of all patients treated.

The number of *patients treated to a conclusion* during the year is the subject of the tables which follow.

I—TABLE SHOWING HOW THE 4,939 PATIENTS TREATED TO A CONCLUSION DURING THE YEAR WERE ORIGINALLY ADMITTED.

By Almoner	..	..	..	..	..	..	2,030
By Almoner acting as Relieving Officer	..	..	..	..			37
By Medical Superintendent :—							
Births	..	..	..	..	..	..	522
Accidents (other than those admitted by Almoner) ..						..	315
Maternity cases (other than those admitted by Almoner) ..							76
Other urgent cases	..	..	..	..	..	..	1,750
Transfer from institution or home—M.C.C.	..	..	..	..	..		87
Transfer from hospital—M.C.C.	..	..	..	..	..		—
Transfer from hospital or institution—other authority	..						4
By agreement with another authority	..	..	..	..	..		118
							—
Total	..	..	..	..	..	..	4,939
							—

II.—TABLE SHOWING THE DISTRICTS TO WHICH THE 4,939 PATIENTS BELONGED.

Borough of Hendon	1,913
Urban District of Harrow	1,741
Borough of Wembley	1,228
Other districts of Middlesex	57
Total	4,939

Note.—The allotment of an accident case to any one of the preceding districts is governed by the following rules :—

- (1) A person admitted, who is normally resident within the County, becomes a case for the district of residence, irrespective of the district in which the accident occurred.
- (2) A person admitted, not being normally resident within the County, becomes a case for the district in which the accident actually occurred.
- (3) A person admitted from and normally resident outside the County area becomes a case for the Borough of Hendon, being the district in which the hospital is situate.

III.—TABLE SHOWING THE RESULTS OF TREATMENT OR THE TERMINATION, TOGETHER WITH ANALYSES OF DEATHS IN AGE AND OTHER GROUPS.

Cured	3,687 = 74·6 per cent.
Relieved	912 = 18·5 „
Unrelieved	100 = 2·0 „
Died	240 = 4·9 „

Analysis of Deaths in Age Groups.

Ages.	Male.	Female.	Totals.
Under 1	21	15	36
1-2	—	3	3
2-5	3	7	10
5-15	5	6	11
15-25	7	15	22
25-35	15	16	31
35-45	18	19	37
45-55	17	13	30
55-65	21	14	35
65-75	10	7	17
Over 75	3	5	8
Totals.. .. .	120	120	240

	Treated.	Percent- age of total.	Died.	Case Mortality per cent.
Medical cases	1,197	24	121	10·1
Surgical and obstetric cases	3,742	76	119	3·1
Deaths within 12 hours of admission			35	
Deaths 12 to 24 hours after admission			30	
Deaths 24 to 48 hours after admission			20	
Deaths 48 to 72 hours after admission			16	
Deaths due to Pulmonary Tuberculosis			1	
			—	102
All other deaths				138
Total deaths				240

For the causes of death, see Table VI.

IV.—TABLE SHOWING THE MANNER OF PATIENTS' DISCHARGE.

Discharge.

In the normal manner or by death	..	..	..	..	4,827
At own request, with Medical Superintendent's approval	..				31
At own request, against Medical Superintendent's advice	..				81
Total	..	..	..	..	4,939

V.—TABLE SHOWING WHITHER THE 4,939 PATIENTS WERE DISCHARGED.

To own, relative's or friend's home	..	..	..	..	2,559
To institution or children's home—M.C.C.	..	..	..		137
To out-patients' department	..	..	..	..	1,548
To convalescent home	..	..	..	..	390
To general hospital—M.C.C.	..	..	..	..	11
To hospital or institution—other authority	..	..	..		15
To acute infectious disease hospital	..	..	..	..	19
To mental hospital	..	..	..	..	2
To sanatorium	..	..	..	..	12
To voluntary hospital	..	..	..	..	6
Died	..	..	..	..	240
Total	..	..	..	..	4,939

VI.—CLASSIFICATION OF THE DISEASES AND CONDITIONS FOR WHICH THE 4,939 DISCHARGED PATIENTS WERE PRIMARILY TREATED DURING 1937.

Classified according to the Nomenclature of Diseases (Sixth Edition, 1931), drawn up by the Royal College of Physicians of London.

Disease or Condition.	Medical.			Surgical and Obstetric.			Totals.
	Relieved.	Unrelieved.	Died.	Relieved.	Unrelieved.	Died.	
Healthy—							
No abnormality detected	16	—	—	—	—	—	16
Breast-fed infant with mother	43	—	—	—	—	—	43
Births	—	—	—	509	—	13	522
Diseases due to infection—							
Erysipelas	2	—	—	—	—	—	2
Gonorrhœa	4	6	—	—	—	—	10
Influenza	25	—	—	—	—	—	25
Influenzal Pneumonia	19	—	12	—	—	—	31
Measles—morbilli and rubella	—	1	—	—	—	—	1
Mumps, pertussis, varicella	—	4	—	—	—	—	4
Rheumatism—acute and sub-acute ..	35	—	2	—	—	—	37
Rheumatic chorea	3	—	1	—	—	—	4
Syphilis—primary and secondary ..	—	—	—	—	—	—	—
Tuberculosis—pulmonary	10	17	1	—	—	—	28
Tuberculosis—non-pulmonary	3	2	7	8	2	1	23
Miscellaneous notifiable	9	4	3	—	—	—	16
Miscellaneous non-notifiable	6	—	6	—	—	—	12
Infestations by metazoan parasites ..	6	—	—	—	—	—	6
Diseases of the nervous system—							
Of vascular origin	7	2	5	—	—	—	14
Mental diseases	12	1	—	—	—	—	13
Miscellaneous	15	2	—	—	—	—	17
Diseases of the eye	—	—	—	5	1	—	6
Diseases of the ear	—	—	—	199	2	4	205
Diseases of the nose and sinuses	—	—	—	30	—	—	30
Diseases of the circulatory system—							
Rheumatic carditis—chronic	21	—	4	—	—	—	25
Myocardial degeneration, etc.	4	4	5	—	—	—	13
Arteriosclerosis, hyperpiesis	11	1	—	—	—	—	12
Of the veins	10	—	—	—	—	—	10
Miscellaneous	7	3	1	—	—	—	11
Diseases of the blood and spleen	13	1	2	—	—	—	16
Diseases of the lymphatic system	3	—	—	61	—	—	64
Diseases of the endocrine glands	11	—	1	—	—	—	12
Diseases of the breast	—	—	—	17	—	—	17
Diseases of the respiratory system—							
Bronchitis—acute	62	—	—	—	—	—	62
Bronchitis—chronic	9	1	1	—	—	—	11
Asthma	21	—	—	—	—	—	21
Pneumonia—primary	63	—	13	—	—	—	76
Broncho-pneumonia	51	—	17	—	—	—	68
Pleurisy, empyema	15	—	—	6	—	—	21
Miscellaneous	12	—	1	—	—	—	13
Diseases of the teeth and gums	—	—	—	36	—	—	36
Diseases of the digestive system—							
Tonsillitis	—	—	—	91	—	1	92
Enlarged tonsils and/or adenoids ..	—	—	—	220	—	—	220
Peptic ulcers	68	2	2	16	—	5	93
Dyspepsia of infants	39	—	11	—	—	—	50

Disease or Condition.	Medical.			Surgical and Obstetric.			Totals.
	Relieved.	Unrelieved.	Died.	Relieved.	Unrelieved.	Died.	
Diseases of the digestive system— <i>contd.</i>							
Of stomach and duodenum—other ..	36	—	—	—	—	—	36
Appendicitis	3	—	—	304	—	11	318
Visceroptosis, constipation, stasis ..	67	—	—	—	—	—	67
Herniæ	—	—	—	82	4	3	89
Of intestine, rectum, anus—other ..	12	—	1	38	—	7	58
Of liver and gal' bladder	24	1	4	16	—	—	45
Of peritoneum	—	—	—	16	—	1	17
Miscellaneous	16	1	2	—	—	—	19
Diseases due to disorders of nutrition or of metabolism	40	—	4	—	—	—	44
Diseases of the generative system—							
Of the male organs	—	—	—	124	3	1	128
Of the female organs	—	—	—	51	1	—	52
Pregnancy, parturition and puerperium—							
Normal and abnormal conditions ..	—	—	—	959	—	13	972
*Diseases of the organs of locomotion—							
Fibrositis group	19	—	—	—	—	—	19
Arthritis deformans	14	—	—	—	—	—	14
Osteomyelitis—acute and chronic ..	—	—	—	22	—	1	23
Miscellaneous	—	—	—	19	—	—	19
Diseases of the areolar tissue	—	—	—	55	—	2	57
Diseases of the skin	58	—	—	—	—	—	58
Diseases of the urinary organs—							
Nephritis	12	1	7	—	—	—	20
Pyelitis	37	—	1	—	—	—	38
Miscellaneous	25	2	1	22	—	2	52
Injuries—							
Superficial	—	—	—	33	—	—	33
Deep, internal and foreign bodies ..	—	—	—	42	—	3	45
†Shock or other general injury	—	—	—	27	—	—	27
†Cerebral concussion	—	—	—	80	1	—	81
†Cerebral contusion	—	—	—	33	—	1	34
Burns and scalds	—	—	—	44	—	3	47
Wounds—clean and septic	—	—	—	57	1	2	60
Septic conditions of the hand	—	—	—	26	—	—	26
Fractures and dislocations	—	—	—	226	4	21	251
Miscellaneous	—	—	—	1	—	—	1
‡Tumours, benign—							
Of the generative system	—	—	—	28	2	5	35
Of other organs and structures	—	—	—	7	—	—	7
Tumours, malignant—							
Of the digestive system	—	—	—	6	5	10	21
Of the generative system	—	—	—	4	11	5	20
Of the urinary organs	—	—	—	1	—	1	2
Of other organs and structures	—	—	—	5	1	2	8
Tumours—intra-cranial	—	2	2	—	—	—	4
Cysts	—	—	—	27	—	—	27
Malformations—congenital	1	2	3	1	—	1	8
Poisonings	7	—	1	—	—	—	8
For special investigation/treatment, etc.	9	1	—	30	1	—	41
Totals	1,015	61	121	3,584	39	119	4,939

* 1918 group-title retained. That for 1931 is: Diseases of bones, joints, muscles, fasciæ and bursæ.
† The majority of cases had additional and superficial injuries.
‡ 1918 classification of tumours retained.

Diseases and Conditions treated to a Conclusion.

(Grouped in order of frequency.)

	Treated.	Died.
Pregnancy, parturition and puerperium ..	972	13
Diseases of the digestive system	792	47
Injuries—general and local	605	30
Diseases of the ear, nose and throat ..	547	5
Births	522	13
Diseases of the respiratory system	272	32
Diseases due to infection	193	33
Diseases of generative organs	180	1
Diseases of areolar tissue and skin	115	2
Diseases of urinary organs	110	11
Tumours	97	25
Diseases of organs of locomotion	75	3
Diseases of circulatory system	71	10
Diseases of the lymphatic system ..	64	—
Diseases of the nervous system	44	5
Diseases of remaining groups	280	10
	—	—
Total treated ..	4,939 of whom 240 died.	
	—	—

1. Department of Surgery.

Analysis of Operations performed during the Year.

	In-Patients.		Casualty and Out-Patients.		Nurses.		Totals.
	Major.	Minor.	Major.	Minor.	Major.	Minor.	
General—							
On skin and superficial structures ..	7	279	—	1,152	—	6	1,444
On arteries, veins and lymphatics ..	1	107	—	414	—	—	522
On nerves	—	3	—	—	—	—	3
On bones and joints	80	255	—	551	—	—	886
On muscles, tendons, bursæ and fasciæ	5	5	9	5	1	—	25
Amputations	3	8	—	15	—	—	26
On skull, brain and spine	3	46	—	—	—	—	49
On face	6	28	—	134	—	—	168
On eye	—	1	—	144	—	—	145
On mouth, pharynx and œsophagus..	—	4	—	2	—	—	6
On thyroid, accessory glands and neck	7	23	—	—	—	—	30
On breast	6	41	—	2	—	—	49
On thorax and contents	15	45	—	—	—	—	60
On abdominal wall and cavity ..	131	5	—	2	—	—	138
On stomach and duodenum	27	—	—	—	—	—	27
On intestine, rectum and anus ..	366	36	—	4	3	—	409
On liver, gall-bladder, pancreas and spleen	17	—	—	—	—	—	17
On kidney, and urinary tract ..	116	16	50	42	—	—	224
On male generative organs	21	115	—	3	—	—	139
On female generative organs ..	240	25	—	1	—	—	266
Unclassified	—	5	—	—	—	—	5
	1,051	1,047	59	2,471	4	6	4,638
Special—							
Obstetric	118	296	—	30	—	—	444
On ear, nose and throat	228	269	—	71	4	—	572
	1,397	1,612	59	2,572	8	6	5,654
Grand totals	3,009		2,631		14		

Major operations	1,464
Minor operations	4,190
Operative mortality rate per 100 major operations	2.6

When the period of anæsthesia for an operation classified as minor exceeds half an hour, that operation is deemed a major one.

Below are given, under anatomical headings, the names and numbers of the operations most frequently performed.

On Skin and Superficial Structures (1,444)—

Toilet and suturing of wound	621
Toilet and tannic acid treatment of burn or scald	67
Incision for abscess, cellulitis, boil or carbuncle	185
For septic infection of hand	283
For removal of foreign body	94

On Bones and Joints (886)—

Reduction/manipulation/transfixion	628
Renewal of plaster of Paris	220

On Abdominal Wall and Cavity (138)—

Herniotomy for inguinal and femoral herniæ (7 strangulated)	73
Herniotomy for ventral and umbilical herniæ (1 strangulated)	8
Laparotomy—exploratory and for adhesiolysis, peritonitis, abscess, etc... .. .	41

On Stomach, Duodenum, Intestine, Rectum, Anus, Gall-Bladder (453)—

For peptic ulcer (21 perforated)	24
Enterostomy/colostomy, with/without resection	13
Appendicectomy	259
Appendicectomy with drainage	69
Drainage of appendix abscess without appendicectomy	2
Proctoscopy, sigmoidoscopy	15
For ischiorectal and anal abscess	13
Cholecystostomy, cholecystectomy	15

On Kidney, Ureter, Bladder and Urethra (224)—

Cystoscopy	68
Cystoscopy and ureteric catheterisation	61
Nephrectomy, nephrotomy	13
Suprapubic cystostomy	9

On Male Generative Organs (139)—

Suprapubic prostatectomy, diathermy of prostate	8
Circumcision (minor operation)	114

On Female Generative Organs (266)—

On ovary and/or tube	44
For ectopic gestation	10
Uterine curettage	24
Uterine/vaginal plugging and/or glycerine injection	15
Curettage for abortion	135
Hysterectomy	6
Vaginal plastic operation	7

Laparotomy was performed 545 times. This number does not include herniotomies for inguinal and femoral herniæ and open operations on the kidney and bladder; 330 laparotomies were for appendicitis. During the year 315 persons were discharged or died after operations for appendicitis.

Analysis of Operations for Appendicitis performed on Patients treated to a Conclusion.

	Males.			Females.			Totals.		
	Relieved.	Died.	Total.	Relieved.	Died.	Total.	Relieved.	Died.	Total.
Acute*	80	1	81	75	—	75	155	1	156
Acute with local peritonitis ..	10	—	10	7	—	7	17	—	17
Acute with local abscess ..	6	—	6	4	—	4	10	—	10
Acute with general peritonitis ..	28	5	33	20	5	25	48	10	58
Subacute, chronic or interval ..	31	—	31	43	—	43	74	—	74
Totals	155	6	161	149	5	154	304	11	315

* Appendices proved by section to be acutely inflamed.

Operative mortality-rate of 241 acute cases = 4·5 per cent. (2·6 per cent. in 1936).

anipulative Surgery.

Analysis of Fractures and Dislocations treated to a conclusion during the Year, their Nature, together with the Results of their In-patient and Out-patient Treatment secured before or at 31st December.

	Nature.		Result.					Totals.
	Simple.	Compound.	Very Good.	Good.	Medium.	Poor.	Died.	
Skull	9	1	10	—	—	—	—	10
Skull with concussion	5	—	5	—	—	—	—	5
Skull with cerebral contusion ..	16	10	11	6	1	—	8	26
Vertebræ	8	—	7	—	—	—	1	8
Ribs	6	—	5	—	1	—	—	6
Clavicle	3	—	3	—	—	—	—	3
Scapula	—	—	—	—	—	—	—	—
Humerus	23	—	19	2	2	—	—	23
Radius or ulna or both	10	4	13	1	—	—	—	14
Carpus, metacarpus or phalanges ..	2	8	3	—	7	—	—	10
Pelvis	1	—	1	—	—	—	—	1
Femur, neck or great trochanter ..	21	—	2	13	1	3	2	21
Femur, shaft or lower end	10	—	8	1	1	—	—	10
Patella	7	—	7	—	—	—	—	7
Tibia	11	1	12	—	—	—	—	12
Fibula	1	—	1	—	—	—	—	1
Tibia and fibula, simple	26	—	22	2	1	1	—	26
Tibia and fibula, compound	—	6	5	—	1	—	—	6
Tarsus, metatarsus or phalanges ..	6	1	5	1	1	—	—	7
*Multiple bony injuries, simple ..	15	—	7	1	2	—	5	15
*†Multiple bony injuries, compound ..	—	12	5	1	1	—	5	12
Fracture-dislocations, various ..	13	—	10	3	—	—	—	13
Separated epiphyses	6	—	6	—	—	—	—	6
Dislocations, various	3	1	4	—	—	—	—	4
Pathological, malunited, &c. ..	5	—	3	1	1	—	—	5
Totals.. .. .	207	44	174	32	20	4	21	251

* Multiple fractures of the vertebral column, hand and foot and cases of fractured ribs, tibia with fibula and radius with ulna are not included in this group unless associated with one or more fractures or dislocations elsewhere. Multiple fractures of the bones of the skull, face and nose are not classified as multiple.
† One or more injuries being compound, not necessarily all.
17·5 per cent. of the fracture and dislocation cases were of the compound variety.

Results of Treatment.

Very good	..	..	174 = 69 per cent.
Good	..	..	32 = 13 „
Medium or poor	..	..	24 = 10 „
Died	..	..	21 = 8 „
Totals	..	..	251 = 100 „

N.B.—The result of treatment is classified as “very good” only when the three following conditions are fulfilled :—

1. Little or no depreciation of function.
2. Anatomical alignment of fragments.
3. Shortening, if present, not exceeding half an inch.

The result of a fracture successfully treated by amputation is classified as medium.

Of 24 patients whose results were medium or poor, 8 had amputations (7 for compound fracture of phalanges, 1 for compound fracture of tibia and fibula); 8 were transferred to the Infirmary before completion of treatment on account of age and debility; 4 were self-discharged; 1 had pathological fractures; and the remaining 3 had respectively compound fractures of os calcis, comminuted fracture of tibia and fibula and compound multiple fracture.

Cause of death :—

Cerebral contusion or laceration	..	..	..	..	..	13
Shock	..	..	..	..	..	4
Chronic nephritis	..	..	..	..	..	1
Edema of cervical spinal cord	..	..	..	..	..	1
Ruptured bladder	..	..	..	..	..	1
Pneumonia	..	..	..	..	..	1
Total fracture deaths	..	..	..	..	..	21

During the year there were treated to a conclusion, and entirely as out-patients, 466 cases of fracture and dislocation. These are not included in the above analysis and are additional.

Analysis of the 466 out-patient cases—

Of upper extremity	..	..	..	..	..	..	272
Of lower extremity	..	..	..	..	..	..	114
Of clavicle	..	..	..	..	..	..	53
Miscellaneous	..	..	..	..	..	..	27
Total..	..	..	..	..	..	..	466

The total number of fracture and dislocation cases treated to a conclusion is therefore 717.

The Resident Surgeon has charge of all in-patient and out-patient fracture cases and holds a Traumatic Surgery Clinic twice weekly. Continuity of treatment, efficient after-care and unity of control are thus secured.

Attendances at the twice-weekly clinics at 3,798 compare with 2,893 made in 1936.

2. Department of Anæsthetics.

Unless contra-indicated, an injection of omnopon-scopolamine is used as a routine measure for basal narcosis.

Analysis of Anæsthetics administered during the Year.

	In-Patients.	Casualties and Out- Patients.	Dental.	Totals.
General Anæsthesia—				
By chloroform, ether or mixture ..	337	21	—	358
By ethyl chloride with/without ether..	449	23	28	500
By nitrous oxide and oxygen	259	340	440*	1,039
By nitrous oxide, oxygen and ether ..	803	—	5	808
By sodium evipan	9	2	2	13
Local Anæsthesia—				
By application to mucous membrane ..	84	203	—	287
By freezing with ethyl chloride ..	—	32	—	32
By infiltration	51	154	12	217
Regional by infiltration and nerve block	10	—	3	13
Spinal Anæsthesia—				
By intrathecal injection	159	—	—	159
Totals	2,161	775	490	3,426

* Administered by the nasal route.

Summary.

General anæsthetics	2,718
Local anæsthetics	549
Spinal anæsthetics	159
Total	3,426

Of the general anæsthetics given to in-patients, 258 were administered in the wards and 155 in the maternity department.

There were 2 deaths under general anæsthesia given for the removal of a retained placenta and for acute appendicitis respectively.

3. Dental Department.

Analysis of Patients treated, Attendances made and Treatments given during the Year.

	Number treated.	Attendances for treatment.
Hospital in-patients	183	555
Infirmiry patients	54	195
Ante-natal clinic cases	53	127
Other out-patients	58	338
Totals	348	1,215

4. Radiological Department.

Hospital in-patients	1,081
Infirmiry patients	144
Out-patients—via Chest Clinic	375
Out-patients—other	2,116
Total patients investigated	3,716

Analysis of Investigations made during the Year.

	Appearances.		Totals.
	Normal.	Abnormal.	
Skull for injury	200	70	270
Skull and contents for disease or deformity	89	97	186
Lungs and mediastinum	537	558	1,095
Pleuræ and pleural conditions	10	79	89
Heart and aorta	16	37	53
Æsophagus, stomach and intestines	178	156	334
Biliary passages	39	34	73
Urinary system	146	95	241
Generative system	47	42	89
Bones and joints for injury	838	1,474	2,312
Bones and joints for disease or deformity	208	182	390
Miscellaneous—for foreign bodies, etc.	64	84	148
Dental	52	79	131
Totals	2,424	2,987	5,411

Special Methods of Investigation.*

Barium meals	289
Barium enemata	26
Cholecystograms	60
Lipiodol injections	16
Pyelograms—retrograde	42
Urograms—intravenous	61
Manipulation and fixation of fracture— Under fluorescent screen with/without local anæsthetic	6
Under screen and general/spinal anæsthesia	30
Tomograms	3
	533

5. Massage.

6. Electro-therapeutic and Light Departments.

Department.	Number of Patients Treated to a Conclusion.			Treatments.		
	I.P.	O.P.	Totals.	I.P.†	O.P.	Totals.
Massage	323	633	956	5,080	7,394	12,474
Electro-therapeutic	56	261	317	656	3,359	4,015
Light	73	87	160	829	1,261	2,090
Grand Totals	452	981	1,433	6,565	12,014	18,579

* Included in the above analysis of investigations and, therefore, not additional.

† Of these, 341 massage, 100 electro-therapeutic and 13 light treatments were given in Redhill Infirmiry at Burnt Oak.

7. Maternity Department.

I. ANTE-NATAL CLINIC.

Ante-natal sessions held	..	..	..	..	..	157
Expectant mothers examined	..	..	..	..	..	1,017
Total attendances	..	..	..	..	..	4,836
Average number seen per session	..	..	..	..	..	30.8
Average number of attendances per expectant mother	..	..	..	..	..	4.8
Women referred for dental treatment	..	..	..	..	..	209*
Women referred for pathological investigation	..	..	..	..	..	83
Women referred for radiological investigation	..	..	..	..	..	67

II. STATISTICAL TABLES AND ANALYSES OF CONFINEMENTS.

Analysis of the 545 Women Delivered who were discharged or who died during the year

						Per cent.
Mother Admitted	..	Via ante-natal clinic	..	..	461	85
		As an emergency case	..	..	84	15
		Total	..	..	545	100
Civil State	..	Married	..	..	509	93
		Unmarried	..	..	36	7
		Total	..	..	545	100
Parous State	..	Primipara	..	..	334	61
		Multipara	..	..	211	39
		Total	..	..	545	100
Presentation	..	Vertex—occipito-anterior	..	..	493	
		Vertex—occipito-posterior	..	..	14	
		Breech—uncomplicated	..	..	15	
		Breech—complicated	..	..	23	
		Face	..	..	2	
		Transverse	..	..	2	
		Brow	..	..	2	
		Born before admission	..	..	2	
		Total	..	..	553	

There were 8 sets of twins :—

Both vertex occipito-anterior	..	..	..	..	..	3 sets
Vertex occipito-anterior and a breech	..	..	..	..	..	1 set
Breech and vertex occipito-anterior	..	..	..	..	..	2 sets
Both breech	..	..	..	..	..	1 set
Breech and persistent occipito-posterior	..	..	..	..	..	1 set

* Of these, 53 received their dental treatment at the hospital.

Induction of Labour.

Indication.	Number of Cases that had Induction.		
	Of Premature Labour.	At or After Term.	Totals.
Maternal toxæmia	6	18	24
Maternal disease	2	4	6
Ante-partum hæmorrhage	—	1	1
Uterine inertia.. .. .	—	1	1
Disproportion	—	6	6
Post-maturity	—	4	4
Fœtal abnormality or death.. .. .	—	3	3
Totals	8	37	45

Induction of labour was undertaken in 45 cases (8·3 per cent. of labours).
In 37 cases (37 births) it succeeded and delivery was by natural forces.
In 17 cases after one medical induction.
In 11 cases after two medical inductions.
In 1 case after one or more medical inductions followed by bougies.
In 8 cases after a single surgical induction.
There were 34 live-births and 3 still-births. In 3 of these the puerperium was morbid.
In 8 cases (9 births) induction failed (see analysis below).

Method of Delivery of the 553 Infants Born and Discharged.

Method of Delivery.	No. of Births.	Deaths.		
		Maternal.	Fœtal.	Neo-Natal.
Natural forces	396	2	14	7
Natural forces after induction	37	—	3	—
Manual.. .. .	27	—	4	2
Manual after induction	1	—	1	—
Forceps	49	—	2	—
Forceps after induction	4	—	—	—
Forceps after failed forceps.. .. .	3	—	—	—
Version after induction	1	—	—	—
Traction-extension to scalp.. .. .	7	—	3	1
Embryotomy	3	—	3	—
Cæsarean section	22	—	1	3
Cæsarean section after induction	3	—	—	—
Totals	553	2	31	13

Midwives delivered 435 women
Doctors delivered 110 „
Midwives sought medical assistance for 104 „
Forceps-rate 10·1 per 100 births.
Maternal morbidity-rate after forceps (booked cases) 3·6
Anæsthetics given for obstetric purposes 127
Average length of lying-in period in days 13

Pregnancy and Labour.

Conditions of both pregnancy and labour normal ..	305	..	56 per cent.
Conditions of either or both abnormal ..	231	..	42 „
Multiple cysis and labour, normal and abnormal..	9	..	2 „
Total	545	100	„

Obstetric Operations performed during the Year.

Surgical induction	9
Artificial rupture of membranes	16
Internal version	1
Manual delivery	28
Episiotomy and repair	74
Traction-extension to scalp	7
Application of forceps	56
Cæsarean section.. .. .	21
Cæsarean section and sterilization	4
Embryotomy	3
Manual removal of placenta and/or membranes	3
Repair of perineum—tear grade 1	121
tear grade 2	70
tear grade 3	1—192
Total.. .. .	414

Indications for which Cæsarean sections were done :—

Indication.	Booked.	Emergency.	Totals.
Placenta prævia	2	2	4
Uterine inertia	2	1	3
Bad obstetric history	1	—	1
Contracted pelvis and disproportion	12	—	12
Contracted pelvis and sterilization	2	—	2
Brow presentation	1	—	1
Hypertension and sterilization	2	—	2
Totals	22	3	25

There were 16 classical and 9 lower segment operations.

There was one foetal death due to detached placenta consequent upon complete placenta prævia.

There were 3 neo-natal deaths ; 1 due to immaturity ; 1 to atelectasis and 1 to multiple congenital deformities.

Maternal Morbidity.

The figures given under this head relate to women admitted to the maternity department for delivery and to booked cases delivered before admission. Of this group all who had pyrexia in the puerperium (Ministry of Health standard) and all who died after delivery or undelivered are included as morbid.

Cases of abortion and ectopic gestation are not admitted to the department. The maternal morbidity of cases of abortion is given under the head of abortion. No case of ectopic gestation was morbid.

—	Booked.	Emergency.	Totals.
pyrexial cases that survived	9	3	12
Pyrexial cases that died	—	1	1
Non-pyrexial maternal deaths	—	2*	2*
Pyrexial cases and maternal deaths	9	6*	15*
Number of women delivered.. .. .	461	84*	545*
Maternal morbidity-rate per 1,000 delivered	19·5	71·4	27·5

* 1 died undelivered.

Pyrexia in the Puerperium.

The Ministry of Health standard of puerperal pyrexia is adopted.

Unless there is definite evidence to the contrary every case of pyrexia occurring in the puerperium is assumed to be due to uterine infection.

In addition to the conditions generally accepted as sequelæ of uterine infection, the following, when they occur in the puerperium, are returned also under that head :—thrombosis, thrombophlebitis, phlegmasia alba dolens, pulmonary embolus, pneumonia and broncho-pneumonia.

During the year 13 cases of pyrexia in the puerperium occurred. 12 recovered and were discharged ; 1 died (Case 19E).

Analysis of the 13 Puerperal Pyrexial Cases.

Register No.	Age.	Gravida.	Maturity. (weeks)	Complication of Labour and/or Maternal Complication.	Method of Delivery.	Pyrexia.*		Cause of Pyrexia.	Cervical Swabbing.	Duration of Pyrexia in days.†	Births.
						Date of Onset.	Day of Puer- perium.				
28	28	1	36	Extended breech	Manual	8 Dec.	3	Uterine infection	P.N.G.	13	Live.
10	18	1	40	Nil	Natural forces	30 Dec.	2	Influenza	—	7	"
19E	25	7	40	Influenzal pneumonia	"	6 Jan.‡	—	Influenzal pneumonia	—	7††	"
71	19	1	40	Pregnancy pyelitis	"	2 Feb.	3	B. coli pyelitis	N.G.	4	"
124E	30	8	31	"	"	14 Mar.‡	—	"	—	2††	"
228	21	1	36	Toxæmia	Forceps	16 Apr.	11	Mastitis (S. Au.)	—	25	"
264E	22	2	40	Nil	Natural forces	6 June	3	Uterine infection	P.N.G.	11	"
316	29	2	40	Pregnancy pyelitis	"	19 July‡	—	B. coli pyelitis	—	4††	S.B.
355	23	1	40	Toxæmia	"	13 Aug.	2	Uterine infection	B. Coli	4	Live.
388E	19	1	40	Eclampsia	Forceps	22 Aug.‡	—	B. coli pyelitis	—	16††	"
366	22	2	40	Nil	Natural forces	28 Aug.	7	"	—	5	"
381	37	2	34	Eclampsia	"	20 Aug.	3	Eclampsia	—	11	"
481	27	1	40	Toxæmia	Forceps**	1 Nov.	4	Uterine infection	S.A.	15	"

* Date and day of the second reading of a temperature of 99° F. or over. In every case the date given here is earlier than that on which the pyrexia became notifiable.

** After induction.

† From date of onset to date of settlement at normal.

‡ Date of delivery, pyrexia pre-existed.

†† Pre-existing pyrexia not included.

E.—After a register number indicates an emergency case.

N.G.—No growth.

S.A.—Staphylococcus albus.

S. Au.—Staphylococcus aureus.

S.B.—Stillbirth.

P.N.G.—Pathogenic organisms not grown.

Summary of the 13 Pyrexial Cases.

Urinary tract infection ..	..	..	..	5
Uterine infection (puerperal fever)	..	..	..	4
Influenzal infection ..	..	..	..	2
Eclampsia ..	..	..	..	1
Breast condition ..	..	..	..	1
Total ..	..	..	..	13

Maternal Deaths.

Register No.	Age.	Gravida.	Maturity.	Complication of Labour and/or Maternal Complication.	Method of Delivery.	Class I.*	Class II.*	Group 1.*	Group 2.*	Births.
19E	25	7	40	Influenzal pneumonia ..	Natural forces	—	Yes	—	Yes	Live.
1279E	29	2	36	Complete placenta prævia ..	Undelivered	Yes	—	—	Yes	—
256E	19	1	36	Acute rheumatic carditis ..	Natural forces	—	Yes	—	Yes	Live.
3						1	2	—	3	2

Case 19E died from influenzal pneumonia on the seventh day of puerperium. Had been ill at home for 7 days. On admission was seriously ill and near term. Had spontaneous delivery of a full time live male infant.

Case 1279E died from shock consequent upon severe ante-partum hæmorrhage. On admission was exsanguinated and 36 weeks pregnant. Temporary improvement followed blood transfusion. Died suddenly and undelivered.

Case 256E died from acute rheumatic carditis. Admitted in 32nd week of pregnancy for treatment of pyelonephritis. Three days later had premature labour and was delivered of a live male infant. Died under anæsthesia given for manual removal of placenta. Post-mortem showed old and recent mitral valve changes and bilateral pyelonephritis with multiple abscesses in kidneys.

Maternal Mortality Rates.

Per 1,000 Booked cases delivered	= Nil
Per 1,000 Emergency cases delivered (1 died undelivered)	= 35.7
Per 1,000 Total cases delivered (1 died undelivered)	= 5.5

* Vide Final Report of Departmental Committee on Maternal Mortality and Morbidity, 1932. Class I.—Deaths directly due to childbearing (abortions and ectopics are not included here); Class II.—Death due to an independent disease; Group 1.—Cases showing a primary avoidable factor; Group 2.—Case showing no primary avoidable factor. E after a register number indicates an emergency case.

III. MATERNITY INFANTS' REPORT.

Births.

								Per cent.
Full time	..	..	..	..	..	..	457	82.7
Immature*	..	..	..	..	..	..	65	11.7
Stillborn	..	..	..	..	..	..	37	5.6
Total births							553	100

Infants not entirely breast fed 55

*The maturity of an infant is determined by its weight. Infants of 5½ lbs. weight and under are classed as immature.

Stillbirths.

Details of the 31 Stillbirths.

Reg. No.	Maternal Complication.	Method of Delivery.	Infant.	Summary No.	Cause of Foetal Death.
Booked (15)—					
22	Pregnancy pyelitis ..	Natural forces* ..	I.	2	Intra-cranial hæmorrhage.
23	" " ..	Natural forces ..	F.T.	5	Unknown.
108	Toxic ante-partum hæmorrhage ..	" " ..	F.T.	1	Ante-partum hæmorrhage.
169	None	" " ..	F.T.	2	Intra-cranial hæmorrhage.
186	Pregnancy toxæmia ..	Manual* ..	F.T.	2	Prolapse of cord.
251	Accidental hæmorrhage	Natural forces ..	I.	3	Retro-placental hæmatoma.
306	None	" " ..	F.T.	5	Unknown.
312	Hydramnios ..	" " ..	I.	4	Anencephaly.
316	Pregnancy pyelitis ..	" " ..	F.T.	5	Unknown.
348	Contracted pelvis ..	Forceps ..	F.T.	2	Intra-cranial hæmorrhage.
360	None	Natural forces ..	I.M.	5	Unknown.
365	Contracted pelvis ..	Forceps ..	F.T.M.	2	Excessive moulding.
434	Pregnancy pyelitis ..	Natural forces ..	Post-mat.	4	Post-maturity.
485	None	" " ..	F.T.	2	Intra-cranial hæmorrhage.
494	Pregnancy toxæmia ..	Natural forces* ..	F.T.	1	Premature separation of placenta.
Emergencies (16)—					
8	Complete placenta prævia	Traction extension to scalp	I.M.	2	Detached placenta.
79	Impacted occipito-posterior	Craniotomy ..	F.T.M.	2	Complication of labour.
91	Complicated breech ..	Manual ..	Post-mat.	4	Post-maturity.
95	Complete placenta prævia	Traction extension to scalp	I.M.	2	Detached placenta.
116	Toxic ante-partum hæmorrhage	Natural forces ..	I.M.	1	Ante-partum hæmorrhage.
185	Prolapse of cord ..	Manual ..	F.T.	2	Prolapse of cord.
190	Toxic ante-partum hæmorrhage	Natural forces ..	F.T.	1	Ante-partum hæmorrhage.
242	Toxæmia and twins ..	Manual† ..	I.	1	Maternal toxæmia.
274	Pregnancy toxæmia ..	Natural forces ..	I	1	" "
398	Toxic ante-partum hæmorrhage	" " ..	F.T.	1	" "
311	Pregnancy toxæmia ..	Natural forces* ..	I.	1	" "
313	Incomplete placenta prævia	Traction extension to scalp	F.T.M.	2	Detached placenta.
333	None	Embryotomy ..	I.	4	Ectromelus and exomphalos.
398	Complete placenta prævia	Cæsarean ..	F.T.	2	Detached placenta.
464	None	Craniotomy ..	F.T.M.	4	Hydrocephalus.
538	None	Manual ..	F.T.	4	"

F.T. — Full-time ; F.T.M. — Full-time macerated ; I — Immature ; I.M. — Immature, macerated.

* After induction. † Second twin.

Summary of primary causes of stillbirths.*

Summary No.	Cause of Stillbirth.	Booked.	Emergency.	Totals.
1	Maternal conditions	2	6	8
2	Complications of labour	6	6	12
3	Placental conditions	1	—	1
4	Fœtal conditions	2	4	6
5	Unknown	4	—	4
	Totals	15	16	31

* Vide "Causation of Fœtal Death," a survey by Holland and others published by the Ministry of Health. "The primary cause of stillbirth is the initial or primary condition which set in train other states which may have had the direct effect of killing the fœtus."

Neo-Natal Deaths.

Details of the 13 Neo-Natal Deaths (deaths within 4 weeks of birth).

Reg. No.	Cause of Death.	Maternal Complication.	Method of Delivery.	Weight at Birth.	Age.
	Booked (6)—			lbs. ozs.	
52	Immaturity (2) ..	Twin pregnancy	Natural forces (2)	4 3	48 hours.
				2 14	24 "
68	Immaturity	Essential hypertension ..	Cæsarean section	2 14	26 "
		sion			
287	Mult. congenital deformities	Hydramnios	" " ..	7 3	24 "
352	Atalectasis	Contracted pelvis	" "	4 11	19 "
424	Immaturity	None	Natural forces ..	2 0	1 hour.
	Emergencies (7)—				
25	Immaturity (2) ..	Twin pregnancy	1. Manual ..	3 11	8 hours.
			2. Natural forces	3 6	8 "
112	Immaturity	Incomplete placenta	Scalp traction ..	4 0	22 "
		prævia			
124	"	Acute pyelitis	Natural forces ..	3 1	4 "
242	"	Hydramnios, toxæmia ..	Manual	4 5	5 "
382	"	Pregnancy toxæmia ..	Natural forces ..	2 10	4 "
458	"	" "	" " ..	5 9	5 days.

Summary of causes of Neo-Natal Deaths.

	Booked.	Emergency.	Totals.
Immaturity	4	7	11
Congenital abnormality	1	—	1
Post-natal disease	1	—	1
Totals	6	7	13

Infantile Mortality Rates.

	Per cent.
Of 553 infants born, 31 were stillborn and 13 died	= 8·0
Of 522 infants born alive, 13 died within 4 weeks of birth	= 2·5
Of 65 immature infants born alive, 11 died within 4 weeks of birth	= 16·9

IV. ANALYSIS OF CASES OF NORMAL AND ABNORMAL PREGNANCY, PARTURITION AND PUERPERIUM
TREATED TO A CONCLUSION IN MATERNITY AND OTHER WARDS DURING THE YEAR.

	Booked.	Emergencies.	Totals.
Pregnancy, normal	2	6	8
Pregnancy and spurious labour pains	21	2	23
Toxæmia of pregnancy	10	9	19
Ectopic gestation	—	13	13
Pregnancy and ante-partum hæmorrhage	—	4	4
Pyelitis of pregnancy	5	7	12
Other affections connected with pregnancy.. .. .	2	14	16
For special investigation/treatment	48	10	58
Abortion, threatened	2	14	16
„ incomplete and complete	5	184	189
„ missed	—	—	—
„ with post-abortion infection/sequela	2	34	36
Labour, normal	281	24	305
„ normal and toxæmia of pregnancy	15	7	22
„ normal and affection connected with pregnancy	9	1	10
„ abnormal	104	23	127
„ abnormal and toxæmia of pregnancy	36	12	48
„ abnormal and affection connected with pregnancy	11	13	24
„ multiple	5	4	9
Puerperium, normal*	—	7	7
Affections consequent on parturition*	—	26	26
Totals	558	414	972

* Admitted as such.

Among the 972 cases analysed above, there occurred 13 deaths. Details of 3 of these are given under the head of maternal deaths. The remaining 10 occurred in emergency cases. One was due to severe pyelonephritis of pregnancy; 1 to ruptured bladder consequent upon incarcerated retroverted gravid uterus; 2 to septicæmia after delivery in their own homes, seven and four days respectively before admission to hospital, and 6 to incomplete abortion (3 had septicæmia, 1 pregnancy toxæmia, 1 pulmonary embolus and 1 hæmorrhage into the broad ligament. The last case refused treatment; a post-mortem examination was made).

Abortion.

(Therapeutic inductions and cases of threatened abortion are not included.)

Cases treated to a conclusion	225
Pyrexial cases that survived	22
Pyrexial case that died	1
Non-pyrexial case that died	5
Total morbid cases	28
Maternal morbidity rate per 1,000 women who aborted	125

V. POST-NATAL CLINIC.

Mothers and infants seen	475
Attendances made	548

8. Pathological Department.

ANALYSIS OF EXAMINATIONS MADE DURING THE YEAR.

Examination made at	BACTERIOLOGY.											BIOCHEMISTRY																				
	Blood Culture.	Cerebrospinal Fluid.	Urine.	Fæces.	Exudates.	Pus.	Sputum.	Swabbings.	Examinations for Gonococci.	Vaccines—Autogenous.	Animal inoculations.	Blood.								Cerebrospinal Fluid.						Urine.				Fæces.	Stomach Contents.	
												Sugar.	Sugar Tolerance Curve.	Urea.	Calcium.	Cholesterol.	Van den Bergh.	Other.	Protein.	Globulin.	Chloride.	Sugar.	Urea.	Lange's Test.	Sugar Estimation.	Urea Concentration Test.	pH.	Other.	Occult Blood.			Fats.	Test Meal.	Test Meal—fractional.
Redhill County Hospital	33	39	955	65	45	275	261	289	38	8	—	77	6	146	1	—	9	1	38	37	27	11	—	—	6	43	151	150	514	1	26	—
Other hospitals*	—	—	—	1	—	—	—	—	—	—	31	—	—	1	—	—	—	1	—	—	—	—	—	15	—	1	—	—	—	—	—	—
Totals	33	39	955	66	45	275	261	289	38	8	31	77	6	147	1	—	9	2	38	37	27	11	—	15	6	44	151	150	514	1	26	—

NOTE.—A serial or group investigation, such as a fractional test-meal, blood-sugar curve, urea concentration test or a Widal reaction (for the whole enteric group and b. abortus) is entered as one investigation. A routine investigation of cerebro-spinal fluid is entered under 3 headings, viz., bacteriology, biochemistry and microscopy.

* North Middlesex County Hospital and Pregnancy Diagnosis Laboratory, Edinburgh.

Examinations made at	OTHER CLINICAL PATHOLOGY.															MORBID ANATOMY.											
	Hæmatology.										Serology.					Microscopy and General.					Histology.		Autopsy.				
	Full Count.	Red Cells and/or Hæmoglobin.	White Cell Count and Differential.	Reticulocyte Count.	Platelet Count.	Red Cell Fragility.	Bleeding Time.	Coagulation Time.	Sedimentation Test.	Blood Grouping.	Blood Compatibility.	Widal Reaction.	Bacterial Agglutinations.	Complement Fixation Test Ge.	Wassermann Reaction—Blood.	Wassermann Reaction—C.S.F.	Urine.	Fæces.	Cerebrospinal Fluid.	Exudates and other Fluids.	Parasitic Infections.	Hair for Ringworm.	Other Examinations.	Surgical Specimens.	Post-mortem Specimens.	Hospital Cases.	Other Cases (Stillbirths, B.I.D.'s).
Redhill County Hospital	149	315	156	9	12	1	9	10	28	101	44	29	14	—	—	—	1,405	21	46	46	—	—	4	4	—	73	48
Other Hospitals	..	—	—	—	—	—	—	—	—	—	—	—	—	23	153	18	—	2	—	—	—	—	—	138	77	—	—
Totals	..	315	156	9	12	1	9	10	28	101	44	29	14	23	153	18	1,405	23	46	46	—	—	4	4	138	73	48

Summary of the Examinations made during the Year.

	At Redhill County Hospital.	At other Hospitals.	Totals.
Bacteriology	2,039	1	2,040
Biochemistry	1,238	18	1,256
Other clinical pathology	2,449	196	2,645
Morbid anatomy	121	215	336
Totals	5,847	430	6,277

Hospital autopsy rate = 30 per cent. (43 per cent. in 1936).

9. Ear, Nose and Throat Department.

Analysis of Operations performed during the Year.

For aural furuncle, foreign body in ear, etc.	2
Paracentesis tympani	8
Mastoidectomy—(Schwartz, 109 ; complete radical, 13).. .. .	122
Mastoid cauterisation, curettage, etc.	12
Submucous resection of septum	9
Antral puncture and wash-out	43
On nasal sinuses—various	2
Cauterisation of nasal mucosa, turbinectomy, etc.	13
Removal of tonsils and adenoids by guillotine	216
Removal of tonsils by dissection	106
Removal of tonsillar remains by dissection	5
For hæmorrhage from tonsillar fossa	1
Quinsies opened	3
Laryngoscopy	1
For post-aural abscess	19
Miscellaneous	10
Total	572

The enucleation of tonsils and adenoids by blunt guillotine (Sluder method) is classified as a minor operation.

On completion of a mastoidectomy, adenoidectomy, if indicated, is performed as a routine procedure. Additional operations such as this are not included in the above analysis.

10. Casualty and Out-Patient Departments.

Casualties—medical and surgical	..	..	..	..	..	2,428
In-patients made out-patients	..	..	..	..	..	1,548
Ante-natal cases	..	..	..	..	..	1,017
*Other out-patients	..	..	..	..	..	7,370
Total casualties and out-patients treated						12,363
Patients on the books at the beginning of the year						527
New casualties and out-patients	..	..	..	..	..	11,836
Total						12,363

* Patients referred by medical practitioners for a specialist's opinion and/or some special investigation or form of treatment.

Departments in which the above were treated.

Department.	Patients.	Attendances.
Medical	768	1,905
Surgical	4,205	12,223
Ante-natal	1,017	4,836
Post-natal	475	548
Ear, nose and throat	1,327	5,547
Dental	160	442
Traumatic surgery clinic	857	3,798
X-ray	2,41	2,903
Massage and Swedish remedial exercises	680	7,394
Electro-therapeutic and light	383	4,621
Totals	12,363	44,217

Average number of attendances per patient	..	..	..	3.6
Operations .. .. .	..	..	..	2,631
General anæsthetics (dental excluded)	..	..	..	386
Local anæsthetics (dental excluded)	..	..	..	389
Admitted to hospital from out-patient department	..	..	..	777
Admitted to hospital from ante-natal clinic	..	..	..	558

11. Nurses' Sick Room.

Complement of nurses at 31st December	..	..	..	..	..	125
Average daily complement of nurses	..	..	..	..	..	119·4
Nurses off duty sick during the year	..	..	..	..	..	65*
Nursing days lost (sick leave included)	..	..	..	..	..	1,297
Average number of nursing days lost per annum—						
Per sick nurse	..	..	..	..	..	20
Per nurse of the average daily complement	..	..	..	..	..	10·9

Based on the figure of the average daily complement, 54 per cent. of the nursing staff was admitted to the sick room in 1937. This compares with 42 per cent. in 1936 and 47 per cent. in 1935. In 1936 the average number of nursing days lost per nurse of the average daily complement was 11·3.

Disabilities.	No.	Major Operations.	Minor Operations.
Influenzal and respiratory conditions	23	—	—
Ear, nose and throat conditions	13	3	—
Septic conditions of finger	12	—	5
Infectious diseases	4	—	—
Septic conditions of skin and areolar tissue	5	—	—
Intestinal conditions	4	4	—
Injuries	4	1	1
Eye conditions	2	—	—
Miscellaneous	6	—	—
Totals.. .. .	73	8	6

* 7 nurses off duty twice, 1 nurse off duty thrice, making 73 admissions to the nurses' sick room.

Comparative Tables.

	1935.	1936.	1937.
Beds—complement at 31st December	215	225	225
„ average daily complement	215	222	225
„ average daily number available	211·8	218·3	224·3
„ average daily number occupied	192	206·4	207·7
Average daily percentage of available beds occupied ..	90·7	94·5	93·5
Patients per occupied bed—average number per annum ..	22·7	22·85	23·77
Nursing staff—average daily complement	89·7†	99·4†	119·4*
Occupied beds—average number per nurse	2·1‡	2·08†	1·73*
Admissions—average daily number	12·3	13·1	13·6
„ percentage by Medical Superintendent	49·2	56·1	58·1
Length of stay—average in days per patient	16·1	15·9	15·3
Medical cases	890	1,014	1,197
Surgical cases	3,472	3,702	3,742
Total cases treated to a conclusion	4,362	4,716	4,939
Patients—cured per cent.	75·6	75·2	74·6
„ relieved „	17·5	18·5	18·5
„ unrelieved „	1·5	1·2	2·0
„ died „	5·4	5·1	4·9
Operations—major	1,220	1,400	1,464
„ major and minor	3,794	4,634	5,654
Anæsthetics—general	2,544	2,546	2,718
Dental patients	328	231	348
„ attendances for treatment	1,224	1,250	1,215
Radiological investigations	2,876	4,012	5,411
Massage treatments	11,178	13,225	12,474
Electro-therapeutic and light treatments	4,351	5,494	6,105
Ante-natal clinic—women examined	868	910	1,017
„ „ „ attendances	3,717	4,279	4,836
Confinements	512	529	545
Maternal mortality rate per 1,000 delivered	5·9	5·7	5·5
Maternal morbidity rate per 1,000 delivered	25·4	22·6	27·5
Births	520	540	553
Stillbirth rate per cent.	5·6	5·6	5·6
Infantile mortality rate per 100 total births	9·4	11·8	8·0
Infantile mortality rate per 100 born alive	4·1	4·9	2·5
Pathological investigations	3,306	5,094	6,277
Casualties and out-patients	7,390	8,701	12,363
Casualty and out-patient attendances	29,849	35,735	44,217

* Includes Matron, 21 sisters and nurses not employed in the wards and 4 masseuses. (Total, 26.)

† „ 20 „ „ „ „ „ 4 „ (Total, 25.)

‡ „ 16 „ „ „ „ „ 4 „ (Total, 21.)

APPENDIX III.

ANNUAL REPORT OF THE MEDICAL SUPERINTENDENT ON THE WORK OF
CENTRAL MIDDLESEX COUNTY HOSPITAL FOR THE YEAR 1937.

Staff.

WHOLE-TIME MEDICAL STAFF.

Medical Superintendent.

H. Carter, M.B., Ch.B., F.R.C.S.E., M.C.O.G.

Deputy Medical Superintendent and Senior Physician.

H. Joules, M.D., B.S., M.R.C.P.

Senior Surgeon.

T. G. I. James, B.Sc., M.B., M.Ch., F.R.C.S.

Surgeon.

N. M. Matheson, M.B., B.Ch., F.R.C.S., M.R.C.P.

Assistant Medical Officers.

- A. D. Abdullah, M.B., Ch.M., M.R.C.P.
- J. Sakula, M.D., B.S., M.R.C.P., D.C.H.
- J. S. MacVine, M.B., B.S., F.R.C.S.E., M.C.O.G.,
- H. Canwarden, M.R.C.S., L.R.C.P., D.A., M.M.S.A., M.C.O.G.
- R. M. Yeates, M.B., B.S., F.R.C.S.
- A. C. R. Rankin, M.B., B.Ch., D.A.
- P. Berbrayer, M.D., M.C.P.S.
- K. T. Hughes, M.B., B.S., M.R.C.P.
- H. W. Hall, M.B., B.S.

VISITING MEDICAL STAFF.

Radiologist.

A. Flett, M.D., D.M.R.E.

Electro-Therapist.

C. A. Robinson, M.A., M.B., B.Ch., D.M.R.E.

Psychiatrist.

G. W. Shore, O.B.E., M.D., B.S., D.P.M., D.P.H.

Laryngologist.

P. Maxwell Ellis, M.D., M.S., F.R.C.S.

Dental Surgeon.

W. Moodie, L.R.C.P., L.R.C.S., L.D.S.

NURSING STAFF.

Matron—Miss B. Gebhard.

Administrative Sisters	..	..	4	Staff Nurses	..	..	76
Departmental Sisters	..	..	7	Staff Nurses (ambulance)	..	..	5
Sister Tutors	..	..	2	Staff Nurse midwifery pupils	..	..	10
Ward and Night Sisters	..	..	32	Probationer Nurses	..	..	132
Masseuses	..	..	5	Mental Nurses	..	..	19
Male Nurses	..	..	9	Assistant Nurses	..	..	69

Steward.

E. W. E. Poole.

Chief Almoner.

Miss M. L. Tate, B.Sc.

Chaplain.

Rev. T. D. Lloyd.

Classification of Beds.

	Male.	Female.	Children.	Total.
Acute medical	62	126	36	224
Acute surgical	53	55	10	118
Gynæcological	—	34	—	34
Maternity	—	28	28	56
Oto-Rhino-Laryngological	5	5	10	20
Orthopædic	12	12	16	40
Dietetic	12	12	—	24
Tuberculosis	10	10	—	20
Mental (short stay)	7	7	—	14
Chronic sick	138	180	—	318
Nursery	—	—	50	50
Totals	299	469	150	918

Total number of beds 918

Daily average number of beds occupied 787

Total patient days 287, 110

Maximum number of beds occupied 870—on 18th April.

Minimum number of beds occupied 699—on 5th September.

Throughout the year, 52 male beds were unavailable, and during the early part of the year, 50 female beds were also unavailable, owing to the modernisation of wards. The temporary loss of these beds is proving to be a serious handicap in accommodating acute cases during the peak periods.

Statistical Tables for the Year ended 31st December, 1937.

Remaining in hospital, 1st January, 1937	827
Admitted	8,200
Born in hospital	698
	<hr/> 9,725
Discharged	7,790
Died	1,135
	<hr/> 8,925
Remaining in hospital on 31st December, 1937	<hr/> 800

Admissions and discharges still continue to show a steady increase, which is chiefly due to more acute cases being treated and also, in a very minor degree, to the chronic beds becoming more mobile.

Classification of In-Patients.

Male infants under 3	781
Boys, 3-16	457
Men	2,556
	<hr/> 3,794
Female infants under 3	646
Girls, 3-16	344
Women	4,141
	<hr/> 5,131
Total	<hr/> 8,925

I.—TABLE SHOWING DURATION OF STAY OF THE 8,925 PATIENTS DURING THE YEAR.

Four weeks or less	7,104
Exceeding four weeks but under thirteen weeks	1,406
Exceeding thirteen weeks	415
Total	<hr/> 8,925

II.—TABLE SHOWING DISPOSAL OF THE 8,925 PATIENTS.

Home	7,107
To public assistance institutions	110
Fever hospitals	56
Sanatoria	40
Convalescent homes	159
Mental hospitals	297
Voluntary hospitals	21
Died	1,135
Total	8,925

These figures, showing the destination of patients on discharge, do not reveal the true and ultimate destination. This is due to the fact that large numbers of cases have been discharged home pending vacancies at convalescent homes and sanatoria, in order to make much needed accommodation available.

III.—TABLE SHOWING THE RESULTS OF TREATMENT.

Cured	5,012	Per cent. 56·3
Relieved	2,223	25·0
In statu quo	555	6·1
Died	1,135	12·6
	8,925	100·00

Deaths.

Ages.	Male.	Female.	Total.
Under 1 year	70	56	126
1-5 years	8	8	16
5-10 years	5	2	7
10-15 years	6	4	10
15-20 years	2	4	6
20-30 years	28	20	48
30-40 years	28	28	56
40-50 years	45	39	84
50-60 years	108	59	167
60-70 years	135	100	235
70-80 years	129	121	250
Over 80 years	46	84	130
Totals	610	525	1,135

Deaths within 24 hours of admission	135
Deaths within 48 hours of admission	91
Deaths within 72 hours of admission	58
	284
All other deaths	851
Total.. .. .	1,135

The total number of deaths has shown a large increase over last year, but, as will be seen from the above table, the increase is chiefly in the cases of advanced years. This is largely due to cases being admitted in the terminal or advanced stages of chronic disease and senility.

IV.—TABLE SHOWING THE DISTRICTS TO WHICH THE 8,925 PATIENTS BELONGED.

Willesden	6,169
Acton	1,900
Hendon	677
*Other areas.. .. .	179
Total.. .. .	8,925

* The majority of patients admitted in this group are from Kingsbury, Wembley, Sudbury and Alperton districts. Certain cases from these districts are accepted for admission direct, owing to their close proximity to the hospital, and this arrangement has worked very satisfactorily for the medical practitioners, patients and patients' relatives. On the completion of the extensions to the hospital, now in course of erection, it should be possible to include these districts, together perhaps with North Ealing, in the hospital's recognized area.

V.—TABLE SHOWING HOW THE 8,925 PATIENTS WERE ADMITTED.

By relieving officers' orders	388
By Medical Superintendent—	
Births	689
Police cases (other than accidents)	92
Accidents	565
Maternity cases (emergency)	736
Transfers	84
Other cases	6,371
Total	8,925

Local medical practitioners have expressed their appreciation in regard to the satisfactory arrangement for direct admission. The above table shows that only about 4·4 per cent. of admissions are now dealt with by relieving officers, such cases consisting mainly of the admission of healthy children to the nursery and mental cases under Section 20 of the Lunacy and Mental Treatment Act, 1890.

VI.—CLASSIFICATION OF THE DISEASES AND CONDITIONS OF THE 8,925 PATIENTS WHO WERE DISCHARGED OR DIED DURING THE YEAR.

Disease or Condition.	Medical.		Surgical and Obstetric.		Totals.
	Dis-charged.	Died.	Dis-charged.	Died.	
Healthy—					
No abnormality detected	107	—	—	—	107
Breast-fed infants with mothers	60	—	—	—	60
Births	—	—	697	30	727
Diseases due to infection—					
Erysipelas	20	—	—	—	20
Gonorrhœa	28	—	6	—	34
Influenza	190	50	—	—	240
Measles—morbilli and rubella	—	—	—	—	7
Mumps, pertussis and varicella	14	—	—	—	14
Rheumatism, acute and sub-acute	54	—	—	—	54
Rheumatic chorea	3	—	—	—	3
Syphilis, primary and secondary	18	—	4	1	23
Tuberculosis, pulmonary	104	68	—	—	172
„ non-pulmonary	—	—	23	2	25
Miscellaneous notifiable	34	5	—	—	39
Miscellaneous non-notifiable	3	—	2	—	5
Diseases of the nervous system—					
Senile dementia	6	6	—	—	12
Mental diseases	526	2	—	—	528
Miscellaneous	55	15	20	3	93

Disease or Condition.	Medical.		Surgical and Obstetric.		Totals.
	Dis-charged.	Died.	Dis-charged.	Died.	
Diseases of the eye	7	3	—	—	10
Diseases of the ear	—	—	158	2	160
Diseases of the nose and sinuses	—	—	20	—	20
Diseases of the circulatory system—					
Rheumatic carditis	35	11	—	—	46
Myocardial degeneration, &c.	3	24	—	—	27
Arterio-sclerosis	12	17	—	—	29
Heart and arteries	140	109	—	—	249
Cerebral hæmorrhage and thrombosis	64	84	—	—	148
Miscellaneous	—	1	—	—	1
Diseases of the blood and spleen	29	10	2	—	41
Diseases of the lymphatic system	13	5	29	—	47
Diseases of the endocrine glands	2	—	19	—	21
Diseases of the breast	—	—	32	—	32
Diseases of the respiratory system—					
Laryngitis	—	—	1	—	1
Bronchitis, acute	169	7	—	—	176
„ chronic	70	19	—	—	89
Pneumonia, primary	150	36	—	1	187
Broncho-pneumonia	132	67	—	—	199
Pleurisy	47	—	19	1	67
Miscellaneous	116	18	—	3	137
Diseases of the teeth and gums	5	—	28	—	33
Diseases of the digestive system—					
Tonsillitis	45	—	148	1	194
Enlarged tonsils and/or adenoids	—	—	36	—	36
Peptic ulcers	129	20	26	5	180
Nasopharynx, pharynx and œsophagus	10	—	15	—	25
Stomach and duodenum, other	52	4	48	3	107
Appendicitis, all	—	—	383	10	393
Visceroptosis, complications and stasis	32	—	21	—	53
Hernia	—	—	81	7	88
Intestine, rectum, anus—other	22	49	198	29	298
Liver and gall bladder	15	1	43	6	65
Peritoneum	5	—	—	3	8
Miscellaneous	7	1	3	1	12
Diseases due to disorders of nutrition or of metabolism	66	15	—	—	81
Diseases of the generative system—					
Male organs	—	—	48	7	55
Female organs	—	—	166	4	170
Pregnancy, parturition and puerperium—Normal and abnormal conditions	—	—	1,165	6	1,171
Diseases of the organs of locomotion—					
Fibrositis group	15	—	2	—	17
Arthritis deformans	89	—	3	5	97
Osteomyelitis, acute and chronic	2	—	18	1	21
Miscellaneous	—	2	4	—	6
Diseases of the areolar tissue	28	—	12	—	40
Diseases of the skin	268	6	85	—	359
Diseases of the urinary organs—					
Nephritis	12	14	3	2	31
Pyelitis	35	—	2	—	37
Miscellaneous	61	8	72	5	146
Injuries—					
Superficial	—	—	30	—	30
Deep and foreign bodies, injuries, various	—	—	136	—	136
Shock and other injury	—	—	6	—	6

Disease or Condition.	Medical.		Surgical and Obstetric.		Totals.
	Dis-charged.	Died.	Dis-charged.	Died.	
Injuries— <i>continued</i> .					
Cerebral concussion	—	—	46	—	46
„ contusion	—	—	2	—	2
Burns and scalds	—	—	47	3	50
Wounds, clean and septic	—	—	62	1	63
Septic conditions of the hand	—	—	29	1	30
Fractures and dislocations	—	—	281	12	293
Miscellaneous	—	—	24	—	24
Tumours, benign—					
Generative system	—	—	4	—	4
Other organs and structures	—	—	13	6	19
Tumours, malignant—					
Digestive system	—	—	43	91	134
Generative system	—	—	30	26	56
Urinary organs	—	—	5	8	13
Other organs and structures	—	—	36	46	82
Tumours, intra-cranial	—	—	10	12	22
Senile decay	84	112	—	—	196
Malformations, congenital	—	—	—	—	—
Poisonings, &c.	9	—	11	3	23
Special investigation/treatment	79	—	44	—	123
Totals	3,288	786	4,502	349	8,925

In-patients—Diseases and Conditions.

(Grouped in order of frequency.)

	Discharged.	Died.	Total.
Diseases of the digestive system	1,319	140	1,459
Pregnancy, parturition and puerperium	1,165	6	1,171
Births	697	30	727
Injuries—general and local	660	20	680
Diseases of the respiratory system	556	116	672
Mental diseases	532	8	540
Diseases of the circulatory system	254	246	500
Diseases of the genito-urinary system	400	39	439
Diseases of skin and areolar tissue	393	6	399
Malignant diseases	114	171	285
Diseases of the nervous system	263	20	283
Acute infectious diseases	230	42	272
Influenza	190	50	240
Rheumatism	225	8	233
Tuberculosis	127	70	197
Senile decay	84	112	196
Venereal diseases	56	1	57
Tumours and cysts—benign	29	16	45
Healthy infants with mothers	167	—	167
Diseases of remaining groups	329	34	363
Totals	7,790	1,135	8,925

Analysis of Admissions of Mental Patients.

	Male.	Female.	Total.
Placed under order by Medical Superintendent (Willesden)	12	29	41
" " " " (Hendon)	15	13	28
" " " " (Acton)	4	3	7
" " relieving officers (Willesden) ..	18	18	36
" " " " (Hendon) ..	45	116	161
" " " " (Acton) ..	3	14	17
" " Justices or police (Willesden) ..	10	7	17
" " " " (Hendon) ..	31	30	61
" " " " (Acton) ..	—	4	4
Transfers from Redhill Institution and Hospital ..	4	11	15
Totals	142	245	387

Admissions, Discharges, Certifications and Deaths of Mental Patients during the Year.

	Male.	Female.	Total.
Remaining in wards on 31st December, 1936	—	4	4
Admissions during the year	142	245	387
Discharges to wards (not certified)	48	78	126
Discharges, care of friends (not certified)	3	8	11
Transferred to mental hospitals (certified)	89	157	246
Died	2	5	7
Remaining in wards on 31st December, 1937	—	1	1

As will be seen by the above table, 63 per cent. of the patients admitted and placed on the various orders were certified and removed to Shenley Mental Hospital; approximately 2 per cent. died, the remainder being not certified.

During the year, 40 patients were transferred to Shenley Mental Hospital as voluntary patients. These transfers show an increase over last year, and co-operation with the psychiatric department has been established, thus enabling the maximum number of suitable cases being dealt with in this category.

Eleven patients were also transferred to Shenley as temporary patients, and throughout the year Section 5 of the Mental Treatment Act, 1930, has been used wherever possible to avoid certification, especially in puerperal cases.

The work of this special department still continues to increase and, as will be seen by the segregation of cases into their respective areas, the Hendon area group is the most predominant. The analysis of admissions reveals that 250 of those admitted were of the Hendon area group, which fact undoubtedly caused increased administrative difficulties in this department.

Work of the Special Departments.

1. Surgical	Major and minor operations	3,554
2. Anæsthetics	General	1,808
	Local	1,512
	Spinal	267
	Dental—local and general	210
		3,797
3. Radiological	Investigations	6,243
	Radiograms	12,508
4. Massage	Patients treated	561
	Attendances	6,232
	Treatments	11,875
5. Electrical treatment	Patients treated	527
	Attendances	8,374
	Treatments	16,608

6. Dental	..	..	..	Patients treated	..	..	..	..	..	302
				Extractions	..	..	..	..	..	1,334
				Dentures and repairs	..	..	..	..	..	144
				Attendances	..	..	..	..	..	1,143
7. Psychiatric	..	..	..	Patients treated	..	..	..	..	..	384
				Attendances	..	..	..	..	..	1,022
8. Maternity	..	..	..	Women examined at ante-natal clinic	..	..	..	..	..	876
				Attendances at ante-natal clinic	..	..	..	..	..	3,271
				Deliveries	..	..	..	..	..	720
				Obstetric operations	..	..	..	..	..	98
9. Pathological	..	..	..	Investigations (carried out at Central Middlesex County Hospital)	..	..	..	..	..	10,439
				Investigations (carried out at other hospitals)	..	..	..	..	..	1,036
10. Out-patients	..	..	..	Number of patients seen	..	..	..	..	..	8,892
				Number of attendances	..	..	..	..	..	30,791
				Number who had received in-patient treatment previously	..	..	..	..	..	2,442
				Number who were subsequently admitted for in-patient treatment	..	..	..	..	..	234
11. Nurses' sick room	..	..	..	Admissions	..	..	..	..	..	128

1. Department of Surgery.

ANALYSIS OF OPERATIONS PERFORMED DURING THE YEAR.

	Theatre.	Wards, Casualty and Out- patients.	Total.
On skull, brain or spine	41	—	41
On sympathetic nervous system	12	—	12
On abdomen and contents	701	—	701
On kidneys and urinary tract	208	—	208
On male generative organs	80	42	122
On female generative organs (gynæcological)	235	79	314
On „ „ „ (obstetrical)	12	86	98
On bones—joints and tendons	177	268	445
Amputations	29	—	29
On veins and arteries	34	120	154
On thorax and chest wall	24	34	58
On ear, nose and throat	221	4	225
On thyroid gland	19	—	19
On skin and superficial structures	330	585	915
On eye	1	212	213
Totals	2,124	1,430	3,554

The following figures relate to operations of special interest or those most commonly performed during the year :—

On skull, brain, spine and nervous system (52)—

For sub-dural hæmorrhage	..	..	..	..	..	..	4
For cerebral tumour	..	..	..	..	..	..	11
For meningocele	..	..	..	..	..	..	2
For cerebral abscess	..	..	..	..	..	..	9
For spinal tumour	..	..	..	..	..	..	1
Ventricular estimation and ventriculography	..	..	..	..	..	..	12
Encephalography	..	..	..	..	..	..	1
Injections for trigeminal neuralgia	..	..	..	..	..	..	3
Intrathecal injection of alcohol	..	..	..	..	..	..	2
Sympathectomy	..	..	..	..	..	..	1
On median nerve	..	..	..	..	..	..	5
Chordotomy	..	..	..	..	..	..	1

On abdomen and its contents (701)—

Rammstedt's operation	..	..	..	..	..	..	..	6
Gastrectomy	..	..	..	..	..	..	..	6
Gastrostomy	..	..	..	..	..	..	..	2
Gastro-enterostomy	..	..	..	..	..	..	..	15
For peptic ulcer—perforated	..	..	..	..	..	..	..	34
Cholecystectomy, cholecystotomy	..	..	..	..	..	..	..	22
Appendicectomy	..	..	..	..	..	..	..	214
Appendicectomy with drainage	..	..	..	..	..	..	..	95
Enterostomy, colostomy with or without resection	..	..	..	..	..	..	..	27
For intestinal obstruction	..	..	..	..	..	..	..	20
Herniotomy (20 strangulated)	..	..	..	..	..	..	..	73
Resection of gut	..	..	..	..	..	..	..	8
Rectal operations	..	..	..	..	..	..	..	112
Intusseption	..	..	..	..	..	..	..	3
Laparotomy exploration, drainage, &c.	..	..	..	..	..	..	..	67

On kidney, ureter and bladder (208)—

Cystoscopy	..	..	..	..	..	..	..	116
Cystoscopy with ureteric catheterization	..	..	..	..	..	..	..	61
Suprapubic cystotomy, cystectomy	..	..	..	..	..	..	..	16
Nephrectomy, nephrotomy	..	..	..	..	..	..	..	12
Ureteric calculus..	..	..	..	..	..	..	..	3

On male generative organs (121)—

Orchidectomy	..	..	..	..	..	..	..	4
Torsion of testis	..	..	..	..	..	..	..	1
Suprapubic prostatectomy	..	..	..	..	..	..	..	7
Operation on vas deferens	..	..	..	..	..	..	..	11
For urethral stricture	..	..	..	..	..	..	..	62
Circumcision	..	..	..	..	..	..	..	24
For varicocele	..	..	..	..	..	..	..	2

On female generative organs (314)—

Hysterectomy	..	..	..	..	..	..	..	7
On tube and/or ovary	..	..	..	..	..	..	..	15
For ectopic gestation	..	..	..	..	..	..	..	10
Dilatation and curettage—evacuation of retained products, biopsy of cervix, &c.	..	..	..	..	..	..	..	254
Plastic on vagina	..	..	..	..	..	..	..	21
Removal of cervical polypi	..	..	..	..	..	..	..	7

On bones, joints and tendons (445)—

For fractures (open reductions—11)	..	..	..	..	..	..	..	331
Arthrodesis	..	..	..	..	..	..	..	1
For osteomyelitis	..	..	..	..	..	..	..	26
Sequestrectomy	..	..	..	..	..	..	..	10
Tenotomy	..	..	..	..	..	..	..	3
Repair of tendon	..	..	..	..	..	..	..	12
Amputations	..	..	..	..	..	..	..	29
Excision of semi-lunar cartilage	..	..	..	..	..	..	..	7

On ear, nose and throat (225)—

Mastoidectomy	..	..	..	..	..	..	..	52
Laryngoscopy	..	..	..	..	..	..	..	5
Myringotomy	..	..	..	..	..	..	..	5
Bronchoscopy	..	..	..	..	..	..	..	1
Tonsillectomy	..	..	..	..	..	..	..	120
Oesophagoscopy	..	..	..	..	..	..	..	2
Caldwell Luc's operation	..	..	..	..	..	..	..	1
Submucous resection of nasal septum..	..	..	..	..	..	..	..	1
Nasal polypi	..	..	..	..	..	..	..	4

Analysis of Fractures and Dislocations during the Year.

Bone or Joint.	Out- patients.	In-patients.		Total.
		Result.		
		Discharged.	Died.	
Skull	—	13	1	14
„ with concussion	—	5	4	9
Vertebræ	1	2	1	4
Ribs	9	22	1	32
Clavicle	7	11	—	18
Scapula	—	2	—	2
Humerus.. .. .	—	12	—	12
Radius or ulna or both	16	39	—	55
Carpus, metacarpus or phalanges	48	1	—	49
Pelvis	—	7	—	7
Femur	—	40	1	41
Patella	—	9	—	9
Tibia	—	22	—	22
Fibula	—	7	—	7
Tibia and fibula (simple and compound)	3	29	1	33
Tarsus, metatarsus phalanges	7	8	—	15
Multiple bony injuries (simple and compound)	—	4	3	7
Fracture—dislocations, various	4	39	—	43
Dislocations, various	12	8	—	20
Separated epiphyses	2	1	—	3
Totals	109	281	12	402

Fracture cases—

In-patients	Male	187	
	Female	106	
		—	293
Out-patients	Male	93	
	Female	16	
		—	109
Grand Total			402

2. Department of Anaesthetics.

During the early part of the year a very necessary and pressing need was fulfilled by the appointment of a full-time resident anaesthetist. The administration of anaesthetics had hitherto been carried out by various members of the medical staff, and this system, although reasonably satisfactory, did not fully meet the demands of the hospital, particularly having in mind the highly specialised methods employed in the modern science of anaesthesia.

Analysis of Anaesthetics administered during the Year.

	Theatre.	Wards.	Total.
<i>General anaesthesia—</i>			
Ether—ether and chloroform	900	144	1,044
Nitrous oxide + oxygen + ether	180	2	182
Nitrous oxide + oxygen	184	4	188
Ethyl chloride (general)	15	11	26
Nitrous oxide	—	265	265
Evipan	83	10	93
Avertin	7	3	10
Totals	1,369	439	1,808

Analysis of Anæsthetics administered during the Year.

	Theatre.	Wards.	Total.
<i>Spinal anæsthesia—</i>			
<i>Intrathecal injection—</i>			
Stovaine	172	6	178
Percaine	86	3	89
Totals	258	9	267
<i>Local anæsthesia—</i>			
Novocaine	240	806	1,046
Ethyl chloride	18	69	87
Cocaine	20	359	379
Totals	278	1,234	1,512

General anæsthetics administered	1,808
Spinal " " "	267
Local " " "	1,512
Grand total	3,587

3. Radiological Department.

In this department both the number of patients radiographed and the number of radiographs taken show an increase of over 20 per cent. on the figures of last year. This fact speaks very highly of the personnel and efficiency in this department, which is becoming increasingly important in modern diagnostic methods.

Number of in-patients radiographed	5,018
Number of out-patients radiographed (casualties)	496
Number of out-patients radiographed (health centres and tuberculosis dispensaries)	729
Total	6,243

Analysis of investigations made during the Year.

	Number.	
	Cases.	Radiographs.
Skull	356	1,294
Lungs	1,629	1,902
,, pleuræ	240	271
Heart	184	226
Biliary passages	74	156
Alimentary system	742	2,147
Urinary system	400	1,067
Generative system	135	248
Bones (injured)	1,624	3,158
Bones (disease)	749	1,812
Teeth	13	40
Miscellaneous	97	187
Totals	6,243	12,508

Special methods of investigation (included in the preceding table)—

Barium meals	446
Barium enemas	114
Barium swallows	29
Cholecystograms	56
Urograms	82
Pyelograms	43
Lipiodol—lungs	45
„ sinuses	7
Encephalograms	4
Ventriculograms	10
Cystograms	3
Urethrograms	2
Miscellaneous	19
Total	860

Screen examinations—

Barium meals	402
Barium enemas	113
Barium swallows	23
Lungs	64
Heart	4
Total	606

4. Massage Department.

Attendances and treatments continue to increase and good results are being achieved, many cases making such good progress that they were able to be discharged to the out-patient department, thereby making accommodation available much earlier than normally would be so.

Admitted for treatment	561
Treatment completed	482
Remaining under treatment	79
In-patients 297	Treatments 5,785
Out-patients 264	„ 6,090
Total 561	Total 11,875

5. Electrical Department.

Owing to the increase of number of patients and attendances, a further weekly session was found to be necessary to deal adequately with the work.

Admitted for treatment	407
Treatment completed	341
Remaining under treatment	66
In-patients	204
Out-patients	323
Total	527
Treatments—	
In-patients	3,769
Out-patients	12,839
Total	16,608
Attendances—	
In-patients	1,896
Out-patients	6,478
Total	8,374

6. Dental Department.

Extractions (multiple and single) by local and general anæsthetic—							
In-patients	483						
Out-patients	851						
	—	1,334					
Anæsthetics (local and general)	210						
Scalings, complete	7						
Dentures	131						
Repairs and additions	13						
Total number of patients seen for treatment, examination and advice	302						
Fillings	28						
Fractured jaws splinted	3						
Attendances	1,143						
Number admitted from out-patient department	3						

7. Psychiatric Department.

This department has become well established and is now an important factor in the hospital's service. Medical practitioners, both local and in the Hendon area, have taken full advantage of this special department, and, as will be seen by the attendances, about 20 patients are seen at each weekly session. Should these attendances continue to increase, as seems most likely, a further weekly session will become essential.

Attended for treatment	384						
Treatment completed	299						
Admitted for in-patient treatment	19						
	—						
Remaining under treatment 31st December, 1937	66						
	—						
In-patients	138	Attendances	151				
Out-patients	246	„	871				
	—		—				
Total	384	Total	1,022				
	—		—				

8. Maternity Department.

Ante-Natal Clinic.

Ante-natal sessions held	101						
Expectant mothers examined	876						
Total attendances	3,271						
Average number per session	32						
Average number of attendances per expectant mother	3·7						

A further ante-natal session was introduced early in the year, making three in all. This was necessary to cope with the ever-increasing number of attendances. Co-operation has been established with Health Centres of surrounding local authorities, and this has reduced the attendances.

Analysis of the 720 deliveries during the year.

								Per cent.
Mother admitted	..	From ante-natal clinic	..	..	..	655	90.9	
		Otherwise	..	..	..	65	9.1	
							720	100.0
Civil state	..	Married	..	..	..	649	90.13	
		Unmarried	..	..	..	71	9.87	
							720	100.0
Parous state	..	Primipara	..	..	..	401	55.55	
		Multipara	..	..	..	319	44.45	
							720	100.0
Presentation	..	Vertex-anterior	..	..	..	660		
		Vertex-posterior	..	..	..	27		
		Breech-anterior	..	..	..	42		
		Breech-posterior	..	..	..	4		
		Face	..	..	..	4		
Total						737		

17 sets of twins included in above.

35 cases were admitted after delivery at home—not included in above figures.

Table showing the method of delivery of the 737 babies born in the department.

Method of Delivery.							Number of Births.	Deaths.		
								Maternal.	Foetal.	Neo-natal.
Natural forces	..	..	..	..	..	..	657	—	22	16
Forceps	..	..	..	..	..	..	27	—	2	2
Cæsarean section	..	..	..	..	..	..	5	—	—	—
Craniotomy	..	..	..	..	..	..	2	—	2	—
Breech	..	..	..	..	..	..	46	1	13	3
Total							737	1	39	21

Surgical inductions	..	..	..	..	..	..	..	8 cases.
Delivered by midwives	..	..	..	..	..	..	..	659 „
Delivered by doctors	..	..	..	..	..	..	..	61 „
Midwife sought medical assistance in	..	..	..	..	..	..	..	89 „

Labour—

								Per cent.
Normal	..	..	..	..	..	..	599	83.19
Abnormal	..	..	..	..	..	..	104	14.44
Multiple	..	..	..	..	..	..	17	2.37
Total..							720	100.00

Births—

								Per cent.
Full-time	..	..	..	..	..	..	669	90.77
Premature	..	..	..	..	..	..	29	3.92
Stillborn	..	..	..	..	..	..	39	5.31
Total..							737	100.00

Average weight at birth—ante-natal clinic infants							7 lbs. 4 ozs.
„ „ „ —other infants							6 lbs. 14 ozs.
Infants not entirely breast fed							43
Anæsthetics given for obstetric purposes							93
Anæsthetics given for normal cases—							
Minnett's apparatus and Queen Charlotte's apparatus							664
Average length of lying-in period							13 days.

Obstetrical Operations.

Cæsarean section	5
Manual removal of placenta	6
Removal of placenta, "Crede's method"	1
Version	20
Induction of labour	8
Forceps delivery	27
Craniotomy	2
Perineal repair	17
Treatment of ante-partum hæmorrhage	6
Examination under general anæsthetic	6

Maternal Mortality.

During the year there was only one maternal death (case no. 3098) among those women confined at hospital and two other deaths among those delivered before admission to hospital. All of these were emergency cases, and had not attended the ante-natal clinic. There were also three cases of abortion with infection that died. Below is given a brief résumé of the three maternal deaths.

Mortality rate per 1,000 hospital deliveries 1·38

Case No.	Particulars.
698	PRIMAPARA, aged 25, admitted 5th January, with signs and symptoms of puerperal septicæmia, having been spontaneously delivered of a 32 weeks' stillborn infant at home. Temperature, 103. Pulse, 136. Respiration, 28. No previous illness. Patient's condition improved after admission, and on 14th January she was examined under a general anæsthetic. Bi-manually, uterus was bulky, and there was much thickening in the Pouch of Douglas. No abscess felt. Offensive decidua removed; no curetting. Patient remained very ill, with rapid pulse and temperature, also slight loss per vaginam. Blood transfusion was given on 21st January, but patient did not improve and died on 23rd from puerperal septicæmia, retained products of conception. Confirmed by <i>post-mortem</i> and histological examination.
3098	PRIMAPARA, aged 26, admitted 17th April. Had not attended ante-natal clinic, and was sent in by private doctor as ? multiple pregnancy. No serious previous illness. 19th April, general anæsthetic—impacted breech, extended arms and leg. Bilateral episiotomy performed and arms brought down. Delivered of a full-term stillborn infant. Following delivery, lochia became offensive, temperature slightly lower, but pulse still rapid. She later became delirious, and showed typical signs of septicæmia, dying on 1st May from ulcerative endocarditis and puerperal infection following impacted breech. This was confirmed at autopsy.
3481	4-GRAVIDA, aged 38. Admitted 4 p.m. 16th May for retained placenta, after forceps delivery of a full-term infant at home by private doctor. Patient was pale, very shocked and pulseless on admission, and too ill for operation, dying two hours after admission for obstetric shock and retained placenta. <i>Post-mortem</i> examination revealed very adherent placenta accreta.

Maternal Morbidity.

All fatal cases and all cases in which a temperature of 100·4° F. or more is sustained for a period of 24 hours or recurs during that period. (Ministry of Health standard.)

	Ante-natal clinic.	Non-ante-natal clinic.	Total.
Pyrexial cases	9	7	16
Deaths	—	1	1
Pyrexial cases and maternal deaths	9	8	17
Number of women delivered	655	65	720
Maternal morbidity—rate per 1,000 delivered	13·74	123·07	23·61

Analysis of the 16 Puerperal Pyrexia Cases.

Register Number.*	Age.	Gravida.	Maturity (weeks).	Method of Delivery.	Complication of Labour and/or Maternal Complication.	Pyrexia.		Cause of Pyrexia.	Cervical Swabbing.	Births.†
						Date of Onset.	Day of Puerperium			
15 E.	31	2	36	Natural forces ...	Transverse presentation ...	1937.	3	Pre-partum influenza ...	—	S.B. M.
122	25	3	40	" " ...	Post-partum hæmorrhage, retained placenta	8th Jan.	10	Uterine infection ...	—	Live.
147	24	2	40	Cæsarean section	Disproportion ...	20th Mar.	1	Sapraemia ...	—	Live.
188	29	1	40	Natural forces ...	Nil ...	11th April	5	Uterine infection ...	—	Live.
202 E.	23	1	40	Forceps ...	Delayed second stage, hydrocephalic fetus	13th April	2	Breast abscess ...	—	S.B. M.
220	26	1	40	Natural forces ...	Extended breech ...	22nd April	3	Pyæmia abscesses in lung	Hæm. strep....	S.B.
374	27	2	40	" " ...	Prolapse cord, transverse presentation	25th June	3	Sapraemia ...	—	S.B.
384 E.	18	1	30	" " ...	Nil ...	28th June	2	" " ...	Hæm. strep....	S.B.
545 E.	25	1	38	Forceps ...	Intrapartum eclampsia	12th Sept.	7	Intrapartum eclampsia ...	—	Live.
608 E.	34	4	34	Braxton Hicks's manœuvre ...	Placenta prævia	23rd Oct.	13	Uterine infection ...	No growth ...	S.B.
620	20	1	40	Natural forces ...	Extended breech ...	6th Nov.	9	Breast abscess ...	—	Live.
630	19	1	40	" " ...	Toxæmia ...	10th Nov.	9	Uterine infection ...	—	Live.
632	30	1	40	" " ...	Nil ...	13th Nov.	12	Breast abscess ...	—	Live.
671 E.	35	1	40	Forceps after induction	Persistent occipito posterior ...	21st Nov.	3	Sapraemia ...	—	Live.
683	36	1	40	Forceps ...	Extended breech ...	9th Dec.	13	Breast abscess ...	—	Live.
711 E.	28	2	32	Natural forces ...	Retained placenta ...	17th Dec.	10	Sapraemia ...	—	Live.

* E. after register number indicates emergency case. † S.B. = Stillbirth. M. = Macerated.

Summary of the 16 Pyrexial Cases.

Uterine infection (puerperal fever)	..	..	..	..	..	9
Mammary abscess	..	..	..	..	..	4
Urinary infection	..	..	..	..	..	1
Influenza ..	..	..	..	..	..	1
Pyæmia abscesses—lung	..	..	..	..	..	1
						—
						16
						—

Stillbirths.

Details of the 39 Stillbirths.

No. of Infants.	Method of Delivery.	Causation.	Mother.		Infant.	
			Primi- para.	Multi- para.	Full Term.	Prema- ture.
20	Natural forces ...	Subarachnoid hæmorrhage (confirmed by autopsy) ...	1	—	—	1
		Hydrocephalus, placenta prævia ...	—	1	1	—
		Ante-partum hæmorrhage, placenta prævia ...	—	1	—	1
		Uterine inertia, prolonged first stage ...	1	—	—	1
		Hydramnios, premature multiple pregnancy ...	1	—	—	1
		Toxæmia of pregnancy, ante-partum hæmorrhage ...	—	1	1	—
		Anacephaly, prematurity ...	1	—	—	1
		Macerated foetus, ? cause ...	—	1	1	—
		Uterine inertia, prolonged first stage ...	1	—	1	—
		Premature labour, multiple pregnancy...	1	—	—	1
		Uterine inertia, prolonged second stage...	1	—	1	—
		Puerperal septicæmia, retained products, prematurity ...	1	—	—	1
		Macerated hydrocephalus, maternal pulmonary tuberculosis ...	1	—	1	—
		Macerated foetus, ? cause ...	—	1	1	—
		Toxæmia of pregnancy, ante-partum hæmorrhage ...	1	—	1	—
		Toxæmia of pregnancy, ante-partum hæmorrhage ...	—	1	1	—
		Macerated foetus, ? cause, multiple pregnancy ...	—	1	1	—
		Toxæmia of pregnancy, ante-partum hæmorrhage, prematurity ...	1	—	—	1
		Macerated foetus, prematurity ...	—	1	—	1
		Hydramnios, anacephalus ...	1	—	—	1
13	Natural forces, breech presentation	Extended breech, ante-partum hæmorrhage, placenta prævia ...	—	1	1	—
		Toxæmia of pregnancy, impacted breech delivery ...	—	1	1	—
		Toxæmia of pregnancy, extended breech delivery ...	—	1	1	—
		Placenta prævia, breech delivery ...	—	1	1	—
		Extended breech, prolonged first stage...	1	—	1	—
		Extended brcech, spina bifida, hydrocephalus ...	1	—	1	—
		Extended breech, intracranial hæmorrhage ...	1	—	1	—
		Prolonged first stage, difficult extended breech ...	—	1	1	—
		Extended breech, hydrocephalus spina bifida ...	1	—	1	—
		Extended breech, placenta prævia, ante-partum hæmorrhage ...	—	1	—	1
		Breech delivery, primary prolapse of cord ...	—	1	1	—
		Extended breech, macerated foetus, prematurity ...	1	—	—	1
		Extended breech, macerated foetus, prolonged first stage ...	—	1	1	—
		Macerated foetus, prematurity ...	—	1	—	1
		Hydramnios, anacephaly ...	—	1	1	—
		Prolonged first stage, uterine inertia ...	1	—	1	—
		Hydrocephalus, spina bifida ...	1	—	1	—
		Persistent mento-posterior, prolonged labour ...	—	1	1	—
		Contracted pelvis ...	—	1	1	—
2	Surgical inductions ...					
2	Forceps ...					
1	Failed forceps, craniotomy					
1	Perforation, craniotomy					

<i>Fœtal.</i>								<i>Per cent.</i>	
Hydrocephalus	5		
Anacephalus	3		
							—	8	20·52
<i>Maternal.</i>									
Toxæmia	6		
Placenta prævia	4		
Prematurity	6		
Contracted pelvis	1		
							—	17	43·58
<i>Labour.</i>									
Intracranial hæmorrhage		1		
Subarachnoid hæmorrhage		1		
Prolapse of cord	1		
Delayed, obstructed or prolonged labour		8		
							—	11	28·21
<i>Unknown</i>		3	7·69
							—	—	—
			Total		39	100·0

Details of the Neo-natal Deaths (within 4 weeks of birth).

Method of Delivery.			Maternal Complication.					Cause of Death.				Weight at Birth.	Age.
												lbs. ozs.	
Natural forces	...	...	Nil	...	...	...	...	Prematurity	...	...	...	3 13	17 hours.
"	...	...	Nil	...	...	...	...	"	...	...	...	2 5	7 "
"	...	...	Nil	...	...	...	...	"	...	...	...	3 0	12 "
"	...	...	Nil	...	...	...	...	Acute ileocolitis	...	...	...	6 4	18 days.
"	...	...	Ante-partum hæmorrhage	...	...	...	...	Prematurity	...	...	...	2 4	3 "
Forcep	...	...	Prolonged labour	...	...	...	...	Intracranial hæmorrhage	...	...	...	6 12	$\frac{3}{4}$ hour.
"	...	...	Uterine inertia, multiple labour	...	...	...	...	"	"	...	...	4 12	2 days.
Natural forces	...	...	Nil	...	...	...	...	Prematurity	...	...	...	5 2	20 hours.
"	...	...	Nil	...	...	...	...	Cardiac failure, prematurity	...	...	...	5 5	2 "
"	...	...	Prolonged labour	...	...	...	...	Intracranial hæmorrhage	...	...	...	6 8	2 days.
Leg traction	...	...	Placenta prævia	...	...	...	...	Prematurity	...	...	...	2 7	7 hours.
Natural forces	...	...	Nil	...	...	...	...	"	...	...	...	2 3	4 days.
"	...	...	Nil	...	...	...	...	"	...	...	...	3 7	2 "
"	...	...	Multiple labour, mentally defective	...	...	...	...	"	first twin	...	...	3 4	3 hours.
"	...	...	"	"	"	...	...	"	second twin	...	...	3 3	10 "
"	...	...	Nil	...	...	...	...	"	...	...	...	3 6	19 "
"	...	...	Nil	...	...	...	...	"	...	...	...	2 4	3 days.
"	...	...	Manual removal of adherent placenta	...	...	...	...	"	...	...	...	2 0	6 hours.
"	...	...	Nil	...	...	...	...	Atelectasis...	...	...	...	8 9	4 "
Extended breech	...	...	Mentally defective	...	...	...	...	Intracranial hæmorrhage	...	...	...	6 10	3 days.
"	"	...	Prolonged labour, multiple labour	...	...	...	...	Prematurity	...	...	...	3 12	6 hours.
Average weight at birth											4 lbs. 2 ozs.		
Average age at death											2 days.		

Summary of Neo-Natal Deaths.

Prematurity	..	..	..	..	..	..	..	..	14
Prematurity with cardiac failure				..	..	..	..	..	1
Intracranial hæmorrhage			..	..	..	..	..	..	4
Atelectasis	..	..	..	..	..	..	..	..	1
Acute ileocolitis	..	..	..	..	..	..	..	..	1
									—
Total				..	..	..	..	..	21

Analysis of Breech Presentations.

	B or E	Num- ber of Cases.	Result.					
			Mothers.		Children.			
			L.	D.	L.	S.B.	M.	D.
Complicated breech	B	11	11	—	9	—	—	2
	E	3	2	1	1	2	—	—
Uncomplicated breech	B	10	10	—	8	2	—	—
	E	2	2	—	1	1	—	—
Multiple pregnancy (all twins)	B	5	5	—	10	—	—	—
	E	1	1	—	—	—	1	1
Hydrocephaly	B	1	1	—	—	1	—	—
	E	2	2	—	1	1	—	—
Transverse lie—breech	B	2	2	—	2	—	—	—
	E	1	1	—	—	—	1	—
Placenta prævia	B	4	4	—	4	—	—	—
	E	3	3	—	—	3	—	—
Nil. Prolapse of cord	B	1	1	—	—	1	—	—
	—	46	45	1	36	11	2	3

Analysis of Indications in Special Methods of Delivery.

Method of Delivery.	Indication.	B or E.	Num- ber of Cases.	Result.					
				Mothers.		Children.			
				L.	D.	L.	S.B.	M.	D.
Craniotomy	Persistent occipito-posterior. “Failed forceps” ..	B	1	1	—	—	1	—	—
	Persistent mento-posterior. “Failed forceps” ..	E	1	1	—	—	1	—	—
		—	2	2	—	—	2	—	—
Cæsarean section	Contracted pelvis	B	2	2	—	2	—	—	—
	Placenta prævia	B	1	1	—	1	—	—	—
		E	1	1	—	1	—	—	—
	Multiple fibro-myomata uteri	B	1	1	—	1	—	—	—
		—	5	5	—	5	—	—	—
Forceps	Prolonged second stage associated with posterior positions and uterine inertia	E	3	3	—	2	—	—	1
		B	21	21	—	19	1	—	1
	Eclampsia	B	1	1	—	1	—	—	—
	Obstructed labour—R.M. posterior	B	1	1	—	1	—	—	—
	Obstructed labour—hydro- cephalus	E	1	1	—	—	—	1	—
		—	27	27	—	23	1	1	2

B = booked case. E = emergency case.

Analysis of Cases of Normal and Abnormal Pregnancy, Parturition and Puerperium treated in Maternity, Gynæcological and other Wards during the Year.

	Deaths.	Total.
Pregnancy	—	17
Pregnancy and spurious labour pains	—	62
Toxæmia of pregnancy	—	17
Abnormal condition of gravid uterus and ovum	—	8
Ectopic gestation	—	9
Pregnancy—concomitant disease	—	40
Abortion—threatened	—	33
„ complete	—	94
„ incomplete	—	85
„ with local infection	2	19
„ with general peritonitis	1	4
Labour—normal	—	660
„ normal and toxæmia of pregnancy	—	10
„ normal and concomitant disease	—	23
„ abnormal	—	24
„ abnormal and concomitant disease	1	21
„ multiple	—	17
Puerperium—normal	—	10
„ and concomitant disease	2	4
Retained products of conception	—	10
Puerperium—toxæmia, septicæmia and pyæmia	—	1
Mental disorders associated with child-bearing	—	3
Total	6	1,171

Maternal Morbidity of Cases of Abortion.

Cases during the year	235
Pyrexial cases	5
Deaths	3
Pyrexial cases and deaths	8

Morbidity per cent. 3·4.

9. Dietetic Department.

The segregation of patients needing special dietetic treatment into two wards has greatly facilitated this work. Continuity of treatment and observation has been established after discharge to out-patients. The number of patients treated has increased considerably, and the appended figures give a brief outline of the character of investigation and treatment undertaken. It is hoped that the dietetic kitchen may be provided in close contact with the wards in order that the services of the sister-dietitian shall be more available both to the patients and the nursing staff.

Details of Pathological Investigations in the Dietetic Department.

Glucose tolerance tests	27
Blood sugar curves	36
Daily blood sugars	570
Out-patients—blood sugars	120
	753

Details of Cases for the Year.

Disease.	Number.	Operations.
Peptic ulcer	197	23
Peptic ulcers with hæmatemesis treated with Puree diet	57	—
Diabetes mellitus with complications (various)	84	2
Colitis	12	1
Obesity	11	—
Carcinoma of stomach	10	—
Renal disease	6	—
Anæmia	5	—
Cholecystitis	4	—
Hyperthyroidism	4	—
Vitamin deficiency	1	—
? Sprue	1	—
? Hyperparathyroidism	1	—
Dietetic investigation	17	—
Totals	410	26

10. Department of Pathology.

Summary of Examinations made during the Year.

	At Central Middlesex County Hospital.	At other Hospitals.	Totals.
Bacteriology	3,102	91	3,193
Biochemistry	3,817	—	3,817
Other clinical pathology	3,520	545	4,065
Morbid anatomy	479	400	879
Totals.. .. .	10,918	1,036	11,954

Hospital autopsy rate = 42·2 per cent.

Other Clinical Pathology.															Morbid Anatomy.																																																																													
															Histology.		Autopsy.																																																																											
															Microscopy and General.																																																																													
															Serology.			Hæmatology.																																																																										
															Full Count.			Red Cells and Hæmoglobin.			White Cell Count and Differential.			Reticulocyte Count.			Platelet Count.			Red Cell Fragility.			Bleeding Time.			Coagulation Time.			Sedimentation Test.			Blood Grouping.			Blood Compatibility.			Widal Reaction.			Bacterial Agglutinations.			Complement Fixation Test. Gc.			Wassermann Reaction—Blood.			Wassermann Reaction—C.S.F.			Urine.			Fæces.			Cerebrospinal Fluid.			Exudates and other Fluids.			Parasitic Infections.			Hair for Ringworm.			Other Examinations.			Surgical Specimens.			Post-Mortem Specimens.			Hospital Cases.		
Central Middlesex	360	301	140	78	16	7	10	10	10	206	169	89	143	274	—	—	—	794	—	319	498	42	1	63	—	—	479																																																																	
Other Hospitals*	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11	398	136	—	—	—	—	—	—	—	185	215	—																																																																	

11. Casualty and Out-Patient Department.

									Patients.	Attendances.
Casualty	..	..	..	..	..	..	..	..	3,715	9,277
Medical and surgical		..	..	..	..	..	..	..	2,268	6,565
X-ray	..	..	..	..	..	..	..	..	1,225	1,225
Massage	..	..	..	..	..	..	..	..	264	5,232
Electrical	..	..	..	..	..	..	..	..	323	6,478
Psychiatric	..	..	..	..	..	..	..	..	246	871
Dental..	..	..	..	..	..	..	..	..	851	1,143
Totals									8,892	30,791
Ante-natal	..	..	..	..	..	..	..	..	876	3,271
Grand totals									9,768	34,062

12. Nurses' Sick Room.

Number of nurses at 31st December	..	..	..	..	370
Nurses off sick during the year who were admitted	..	..	..	..	128
Nursing days lost of those admitted	..	..	..	..	1,293
Average number of days lost per sick nurse admitted	..	..	..	..	10·1
Average number of days lost per nurse on staff	..	..	..	..	3·5
Disability—					
Tonsillitis, ear, nose and throat conditions	..	..	..	..	41
Influenza	..	..	..	..	28
Septic infection of skin	..	..	..	..	15
Gastro intestinal disorders	..	..	..	..	11
Bronchitis and/or pneumonia	..	..	..	..	7
Injuries	..	..	..	..	6
Rheumatism	..	..	..	..	4
Notifiable diseases	..	..	..	..	3
Pulmonary tuberculosis	..	..	..	..	2
Nervous breakdown	..	..	..	..	2
Miscellaneous	..	..	..	..	9
					128

Details of Cancer Cases.

Total number of cases during the year 285.

Site.	Number admitted after advice or treatment at other hospitals.	Number admitted without previous hospital advice or treatment.	Number transferred to North Middlesex Hospital for radium and deep X-ray therapy.	Deaths.	Discharged
Uterus	2	35	11	14	12
Tongue and mouth ..	—	7	1	4	2
Breast	1	31	6	12	14
Lip	—	—	—	—	—
Skin	1	12	3	5	5
Larynx	1	2	2	1	—
Bladder	—	12	—	7	5
Rectum	—	28	—	18	10
Other sites—					
Digestive	—	98	—	69	29
Generative	—	21	—	12	9
Urinary	—	1	—	1	—
Miscellaneous ..	—	33	1	28	4
Totals	5	280	24	171	90

Per cent. of male cases 54·73
Per cent. of female cases 45·27

Comparative Tables.

—	1935.	1936.	1937.
Beds—average daily number occupied	798	786	787
Admissions—average daily number	20	22	24
Discharges	7,378	8,143	8,925
Operations—major and minor	3,099	2,847	4,988
Anæsthetics	1,965	2,087	3,797
Dental treatments	878	645	1,143
Radiological investigations	3,924	5,047	6,243
Massage treatments	9,633	9,614	11,875
Electro-therapeutic and sunlight treatments	14,601	14,988	16,608
Ante-natal clinic—women examined	778	849	876
Ante-natal clinic—attendances	3,067	3,054	3,271
Confinements	724	748	720
Maternal mortality—rate per 1,000 delivered	4·13	2·66	1·38
Maternal morbidity—rate per 1,000 delivered	17·93	21·39	23·61
Births	708	722	698
Still-birth rate (per cent.)	3·7	4·1	5·2
Infant mortality rate per 100 total births at hospital	7·3	6·6	8·05
Infant mortality rate per 100 born alive at hospital	3·5	2·6	2·86
Pathological investigations	4,159	6,212	11,475
Casualty and out-patients (excluding ante-natal)	2,168	5,194	8,892
Casualty and out-patient attendances (excluding ante-natal) ..	7,803	15,119	30,791

ANNUAL REPORT OF THE MEDICAL SUPERINTENDENT ON THE WORK OF HILLINGDON COUNTY HOSPITAL FOR THE YEAR 1937.

Staff.

WHOLE-TIME MEDICAL STAFF.

Medical Superintendent—

W. Arklay Steel, M.D., Ch.B., M.R.C.P.

Deputy Medical Superintendent and Surgeon—

L. Fatti, M.B., B.S., F.R.C.S.

Physician—

E. B. Jackson, M.D., M.R.C.P.

Assistant Medical Officers—

Miss J. Morgan, M.D., B.S., M.C.O.G.

H. J. V. Morton, M.A., M.B., B.Chir., D.A.

G. W. Duncan, M.R.C.S., L.R.C.P.

Resident Casualty Officer—

R. E. Glennie, M.B., Ch.B.

VISITING MEDICAL STAFF.

Radiologist—

G. Simon, M.D., B.Chir., D.M.R.E.

Pathologist—

W. Broughton-Alcock, B.A., M.B., M.R.C.S., L.R.C.P.

Dental Surgeon—

S. F. Simpson, L.D.S., R.C.S.

NURSING STAFF (102)—

*Matron—*Miss E. S. Laing.

Administrative sisters	4	Ward sisters	7
Departmental sisters	5	Staff nurses and probationers .	83
Massage sisters	2		

OTHER STAFF—

Steward	Mr. C. Abel.
Chief Almoner	Miss D. Macdonald, M.A.
Almoner	Miss J. Atchley.
Pharmacist	Mr. D. F. B. Pritchard, B.Sc., M.P.S.
Assistant Pharmacist	Mr. E. W. Richard, B.Sc., Ph.C.
Radiographer	Mr. C. Butler, M.S.R.
Pathological Technician	Mr. W. R. Hackett.
Chaplain	Rev. W. G. Prior.

Only one additional appointment, that of a Casualty Officer in 1936, has been made to the number of resident medical staff since 1934. Throughout this transitional period, when the work was increasing very appreciably each year without the provision of additional hospital and resident accommodation, the duties and responsibilities of the medical staff were considerably increased. When the building extensions were completed in December, 1937, it became necessary to increase the number of medical staff. Dr. R. E. Glennie was appointed as resident casualty officer, and commenced duties on 22nd November, 1937. Dr. H. J. V. Morton was appointed resident medical officer (anæsthetist), and later

in the year Dr. G. W. Duncan joined the staff as assistant medical officer (surgical). Mr. W. R. Hackett was appointed pathological technician and commenced duties on 1st April, 1937. Miss J. Atchley was appointed almoner in November and commenced duties in January, 1938.

Beds.

The recent structural extensions have made possible an addition of 64 beds to the complement as revised in 1934. A change in the distribution of the beds has had to be made, so that the complement is now :—

Male—Medical	..	..	..	..	..	..	32	
„ Surgical	..	..	..	..	..	..	32	
							—	64
Female—Medical	..	..	..	..	..	..	32	
„ Surgical	..	..	..	..	..	..	32	
							—	64
Maternity beds	..	..	..	..	..	..	30	
„ cradles	..	..	..	..	..	..	30	
							—	60
Children—Medical		..	..	..	..	..	20	
„ Surgical		..	..	..	..	..	17	
							—	37
Total							..	225

This addition in beds gives the somewhat false impression that a considerable measure of relief will be experienced from the strain put upon the accommodation when the complement stood at 141. The fact that, on many occasions throughout the year, more than 60 beds in excess of the complement of 141 were erected, dispels the feeling of complacency, and rather foreshadows greater limitations to which the hospital may be taxed before additional extensions can be effected.

Great difficulty has been experienced throughout the year owing to lack of facilities for isolation in the children’s wards, which have had to be placed in quarantine on many occasions, and their beds, therefore, rendered unavailable. Appreciation of these difficulties has prompted the Committee to approve of the erection of two temporary children’s wards, each containing 30 cots. These wards will be fully and well-equipped and will provide the facility for segregation required in the modern treatment of children’s diseases. When this work has been completed, the present children’s wards will be used for adult cases. This will give an approximate complement of 285 beds for the second half of 1938.

Once again, with the few exceptions of certain cases of infection, and mental diseases, at no time throughout the year was an appeal made to other hospitals for relief. For the fourth year in succession the claim is made that no case in the extensive district served by the hospital, and comparatively few cases in other districts, have been refused admission.

Nurses’ Training School.

When the hospital was first opened, it was affiliated for training purposes to St. Alfege’s Hospital, Greenwich. In September, 1931, it was approved by the General Nursing Council as a hospital providing complete training for nurses, but it was not until 1933 that the training school was fully organized.

ACADEMIC RESULTS DURING THE YEAR.

	Passed.	Failed.
State Examination—Preliminary	8	—
„ „ Final	11	5
County Nurses Examinations	15	1

In the County Nurses Examination in October, 1937, Nurse Winifred Pope gained a County Silver Medal.

Structural Developments.

It is estimated that it will be at least three years before the eventual promise contained in the plans for future extensions to this hospital can be realised. Foreknowledge of how well endowed and equipped the hospital will be then serves to act as a stimulus. Yet it cannot allay the grave misgivings

raised by the long period which must elapse before any relief in the form of added accommodation to the hospital can be given. Every possibility of improvement of present conditions has been explored, but there is no building available for the centralisation of the special departments, without which the provision of additional temporary huts would be patchwork.

In many of the outlying areas no public transport is available to convey patients to hospital. This prohibits many from seeking out-patient treatment. When transport facilities are improved in 1938 it is estimated that the out-patient attendances will be increased by more than ten thousand each year, and that by 1940 the total number of attendances dealt with by the various out-patient departments will be between fifty and sixty thousand. This total, apart from the trying conditions under which the work is carried out, emphasizes the grave urgency of the building of the new extensions. The chronic wards, sheltering under a title which the building and environment belie, are constantly full to overcrowding, thereby considerably worsening the conditions prevailing and providing a source of complaints to which there can be no reply.

The requirements of the hospital, therefore, in order of urgency, are an out-patient department to incorporate all the special departments and administrative offices, new chronic block, maternity department, and ward extensions.

The hospital extensions, commenced in June, 1936, were completed in November, 1937, and were at once occupied to allow the painting of the old wards to proceed. The theatre suite was completed by the end of 1937. These extensions are a great credit to the County Architect's Department. They have provided the hospital with wards which, in design, spaciousness, utility and beauty, would be difficult to surpass anywhere. The two new wards are excellently equipped and furnished. Each ward unit provides a ward of 24 beds, 8 single cubicles, kitchen, sister's office, clinical room, bathroom, sterilizing room, &c., and the building is capped by a flat roof provided with a solarium and movable wind and sun screens.

The theatre suite is very modernly equipped and comprises the main theatre, anæsthetic room, surgeon's and nurses' and sister's rooms, linen rooms, drum sterilizing room, plaster room, dental room, &c.

Extensions to the nurses' home provide further accommodation for nurses.

The mortuary building contains post-mortem rooms, offices, chapel and refrigeration room.

The garage is built to hold three ambulances and will be enlarged when the future hospital extensions are carried out.

The new buildings have considerably enhanced the appearance of the hospital and there can be no doubt that they have added appreciably to the pride and pleasure of the members of the staff in their work.

The transfer of medical cases to the old surgical wards has made available additional accommodation for maternity cases. The maternity department now occupies a whole floor thus raising the complement to 30 beds. By adapting an adjoining side ward, an additional labour ward has been made, communicating with the old one, and in the same way increased nursery accommodation has been gained.

Approval has been given for the erection of temporary wards for children. It is anticipated that these will be ready for occupation in July, 1938. The wards at present occupied by children, as already stated, will then be available for adult cases. It is not anticipated that these additions will give relief for longer than a year or 18 months at the most.

Almoner's Department.

The end of the second year since the inception of the almoner's department finds it established as an integral part of the hospital system. The increased numbers of out-patients and admissions to the hospital, together with the growth of the department itself, has added considerably to the work. The necessity for additional staff has been recognized and an almoner and junior clerk are due to start work in the new year. The office accommodation has been extended by the erection of yet another hut.

The statistical representation of the work of this department during the year can hardly serve as a true comparison with the 1936 figures by reason of the fact that this department was only in existence during the latter ten months of 1936.

Out-patients :—

(a) Number of patients assessed	..	..	..	..	..	..	1,680
(b) Recommendations for convalescent and special institutional treatment							56
(c) Recommendations for surgical appliances	..	..	..	..			21

In the case of (b) and (c) the Almoner obtains particulars enabling the Area Officer to make assessments.

In-patients.—Apart from school clinic children admitted for tonsil and adenoid operations, maternity patients already interviewed in the ante-natal clinic and patients transferred to the

hospital from the convalescent wards, the majority of the 4,393 patients admitted during the year were either seen by the Almoner in the wards or their relatives were interviewed in the out-patient office.

Ante-natal Department.—No less than 831 new ante-natal patients were interviewed by the Almoner in the out-patient department. Home visits were arranged in a large number of cases and recommendations frequently made to welfare centres and relieving officers for extra milk and financial assistance. Of the total applications made, 99 had to be refused on the grounds that their existing domestic arrangements were adequate. In such cases, advice was given by the Almoner and communications made with the local welfare centre.

Social Work.—Some indication of the amount and variety of this special section may be derived from the following information :—

	No.
Patients who received some form of social assistance	132
Reports relating to patients, issued	173
Reports relating to patients, received	98
Patients referred to voluntary societies, &c.	85
Patients referred to other local or county authorities	59

Advice and assistance, such as admission to special homes, financial help and providing foster-mothers for babies, have been given to 36 unmarried mothers.

Arrangements have been made through the Unemployment Assistance Board, relieving officers, and the Friends of the Poor for help to obtain special diets for gastric and diabetic patients. In addition, numerous cases have been referred to the relieving officer for ordinary financial assistance on account of temporary difficulties.

Ten visits to patients' homes have been made by the Almoner herself or by a student.

Among the societies whose help or advice was sought were :—

- Adelaide Benevolent and Strangers' Friendly Society.
- British Legion.
- British Red Cross Society.
- Council for Promotion of Industries for the Physically Handicapped.
- Central Council for the Care of Cripples.
- Church of England Society for Waifs and Strays.
- District Nursing Association.
- Friends of the Poor.
- Invalid Children's Aid Association.
- National Adoption Society.
- National Children's Adoption Association.
- National Society for the Prevention of Cruelty to Children.
- Roman Catholic Rescue Worker for Archdiocese of Westminster.
- St. Martin-in-the-Fields Relief Committee.
- Salvation Army.
- Uxbridge and Ealing Deanery Association for Preventive and Rescue Work.
- Woman's Mission to Women.

Over 50 patients have benefited by assistance given in the matter of :—

- Fares to hospital ;
- Letters to sanitary inspectors relating to bad housing conditions, fumigation of clothing, &c. ;
- Boarding-out of children while mothers are in hospital ; and
- Reports to voluntary hospitals, employment exchanges and public authorities.

Road accidents have greatly increased hospital medico-legal activities and responsibilities, and the Almoner has helped considerably by her advice and by putting patients in touch with reliable legal advisers.

It will be noticed that the increase in what may be termed "case work" is not as great as might be expected. This is undoubtedly due to the pressure of routine work which left little time for the Almoner to interest herself much in individual patients. It is hoped that the extra assistance afforded by the new appointment will make possible more effective social work.

Work of the Hospital.

The work of the various departments is shown in detail in the statistical tables which form the main part of this report.

There would appear to be no known limit to which the accommodation of a hospital can be extended. Notwithstanding that the "impossible" seemed to have been achieved last year, the turnover for 1937 exceeded that of 1936 by 528. This increase occurred in spite of the fact that on several occasions the children's wards had perforce to be closed on account of infectious disease, and also that during the latter three months of the year the admissions of tonsils and adenoids cases were considerably curtailed. The average daily percentage of beds occupied (137), indicates the strain put upon the chronic wards, which had to accommodate a considerable number of cases primarily intended for the hospital wards, had beds been available therein. There were nursed in this block during the year no less than 85 cases of infectious disease, yet no case of cross infection occurred. This serves as but one illustration of the excellent standard of work of the nursing staff.

The number of cases treated to a conclusion in the hospital wards was 4,391, and in the chronic wards 1,919 (920 in 1935), making a total number of 6,310 discharges for the year.

The statistical tables of this report refer only to the cases treated in the hospital wards.

Based on a complement of 141 beds, the average daily number of beds occupied increased to 177·5, and the average number of patients per occupied bed increased to 24·7. The average daily percentage of available beds occupied at 125·9 compares with 112·7 for 1936. The death rate, which for the previous three years had been steadily falling, this year shows a rise to 6·7 per cent. and the average daily percentage of patients on the dangerously ill list has increased to 26·73, from 18. In spite of the increased turnover, the average length of stay per patient has been increased to 14·8 days.

Special Departments.

The department of Thoracic Surgery is the only addition to the number of special departments. Notice of the work of some of these is taken in the observations made below.

SURGERY.

The combined total of major and minor operations is given as 3,791—an increase of 492 on the corresponding figure for 1936. The new theatre suite is now in use and provides substantially greater comfort and convenience in operating. The old theatre is now used as an auxiliary unit and there many ear, nose and throat operations, casualty minor operations, and certain emergency operations are performed.

A full-time anaesthetist is now employed, not only because of the increase in the number of anaesthetics, but also because of the number of specialty anaesthetics now required. Among other apparatus, a Connell anaesthetic machine has been obtained. It is proving very satisfactory and appears a profitable purchase.

RADIOLOGICAL DEPARTMENT.

The staff of this department now consists of a visiting radiologist and two full-time radiographers. Reference to the statistics shows a considerable increase in the work done. Early in 1938 an X-ray apparatus will be installed in the plaster room of the theatre suite. A dark room has already been provided there and it is anticipated that this service will add considerably to the speed and efficiency of certain fracture, thoracic and urological operations. Additional accommodation, which only the building of a new out-patient department can provide, is urgently required.

MASSAGE, ELECTRO-THERAPEUTIC AND LIGHT DEPARTMENT.

The staff of this department was increased in 1937 but an additional appointment will be made early in 1938 in an endeavour to cope with the increasing number of patients under treatment. The same need for centralization applies to this as to the other special departments.

THORACIC SURGERY.

Shortly after Mr. Fatti's return from America, a chest clinic was established at this hospital. Mr. Fatti also holds the appointment of Surgeon to Harefield and Clare Hall Sanatoria, where the thoracic surgery of tuberculous patients will be performed. Cases are sent to Hillingdon County Hospital from various hospitals throughout the County for examination, investigation and treatment, and during the latter half of the year no less than 80 cases were admitted to this department. Among the various operative procedures carried out were three lobectomies (including two for new growth), six thoracoplasties, 21 adhesiolyses, &c. This hospital is now fully-equipped for this branch of work, not only in theatre equipment, but in the services provided in the cubicles and the solarium of the new ward extensions.

MATERNITY DEPARTMENT.

Every effort was made throughout the year to control the number of booked cases. In spite of this, however, the number of confinements has increased to 567, while the average length of lying-in period has fallen to 10·5 days. In 1938 the accommodation will be increased to the absolute maximum allotment possible—namely, 30 beds. This number will have to serve the requirements of the department until a new maternity unit is built, approximately in three years' time. The rapid growth of the district is likely to increase the demands for admission, and a recurrence of the past very unsatisfactory conditions must be anticipated within this period. Appreciable reductions in the maternal mortality and morbidity figures are recorded, which at 3·5 and 38·8 respectively, are the lowest for the past four years.

EAR, NOSE AND THROAT DEPARTMENT.

Even with the additional beds provided by the recent ward extensions, it has not been possible to allocate separate accommodation to this department. As already mentioned above, the old theatre is being utilized for operations in this specialty. Frequent epidemics of infectious disease, with the occasional placing of the complete children's wards in quarantine, have limited the numbers of admissions of tonsil and adenoids cases. It is hoped that the new children's wards will render this exigency less likely and allow the treatment of many more of these cases to be undertaken.

The attendances at the clinic for diseases of the ear, nose and throat continue to increase in number.

DEPARTMENT OF MEDICINE.

Definite relief has been given to this Department by accommodating medical cases in the wards previously reserved for surgical cases. The accommodation for medical cases has thus been increased by 30 beds, but already on occasions these wards have been taxed to their utmost, and it seems that this relief will be short-lived. An additional medical appointment for this department will be made early in 1938.

CASUALTY AND OUT-PATIENT DEPARTMENT.

Mention is made above of the grave concern felt with regard to this department. The staffs are definitely working under a very unfair disadvantage, besides having to adopt an apologetic defence in anticipation of obvious criticism of those conditions over which they have no control. Admissions and out-patient attendances are increasing beyond the capacity of the allotted buildings, while the essential services, helplessly cramped in their temporary quarters, are rapidly reaching the maximum strain which can be placed upon them. It will soon become impossible to get through the increasing amount of work in the time available, and for the third successive year the urgency of the building of a new out-patient department is stressed. A casualty and minor surgical clinic have been added to the list of clinics specified below :—

Clinic.	Time.	Day.
Dental	10 a.m.	Monday.
Medical	2 p.m.	"
Surgical (i)	10.30 a.m.	Tuesday.
Ante- and post-natal	10 a.m.	Wednesday.
Ear, nose and throat	2 p.m.	"
Casualty	10 a.m.	Thursday.
Orthopædic and fracture	2 p.m.	"
Surgical (ii)	10.30 a.m.	Friday.
Ante-natal	2 p.m.	"

CO-OPERATION WITH GENERAL MEDICAL PRACTITIONERS.

The day a patient is discharged, the medical officer responsible for the care and treatment of the case while in hospital writes to the medical practitioner, giving any important details of examinations or treatments. This service is carried out in all cases where it is considered that such information might be helpful to the medical practitioner in the subsequent treatment of the patient. During the year, 2,324 such letters have been sent, and, in addition, 631 replies were written in the out-patient department relating to patients sent in by doctors for an opinion.

ACKNOWLEDGMENT.

It is impossible to exaggerate the trials and tribulations through which the hospital has passed, or the harassing difficulties with which the members of the staff have had to contend throughout the past year. Numerous appeals to greater efforts, in response to constant emergencies, have been met with the same willingness, goodwill and conscientious co-operation upon which the hospital has grown to depend. It is to those members of the staff that this appreciation is gratefully made.

Statistical Tables and Analyses.

Remaining in hospital	..	..	..	..	..	..	..	..	..	161
Admitted	..	..	..	..	..	..	..	..	..	3,850
Born in hospital	..	..	..	..	..	..	..	..	..	543
										<hr/> 4,554
Discharged	..	..	..	..	..	..	..	..	..	4,096
Died	..	..	..	..	..	..	..	..	..	295
Patients treated to a conclusion	..	..	..	..	..	..	..	..	..	<hr/>4,391
Remaining in hospital on 31st December, 1937	..	..	..	..	..	..	..	..	..	<hr/>163

CLASSIFICATION OF PATIENTS TREATED TO A CONCLUSION.

Male infants under 3	..	..	..	..	..	469	
Boys, 3-16	..	..	..	..	..	498	
Men	..	..	..	..	..	893	
						<hr/> 1,860	
Female infants under 3	..	..	..	..	..	424	
Girls, 3-16	..	..	..	..	..	400	
Women	..	..	..	..	..	1,707	
						<hr/> 2,531	
Total	..	..	..	..	..	4,391	

Children under 16 constituted 40·8 per cent. of all patients treated.

The number of patients treated to a conclusion is the subject of the tables which follow.

I.—TABLE SHOWING HOW THE 4,391 PATIENTS TREATED TO A CONCLUSION DURING THE YEAR WERE ORIGINALLY ADMITTED.

By Almoner	..	..	..	..	..	..	787
By relieving officer's order	..	..	..	..	..	..	24
By Medical Superintendent							
Births	..	..	..	..	..	..	543
Police (other than accidents)	..	..	..	..	..	..	3
Accidents	..	..	..	..	..	..	70
Maternity cases, emergency	..	..	..	..	..	..	75
Other cases	..	..	..	..	..	..	2,746
Transfer from Institution or Home, M.C.C.	..	..	..	..	..	..	124
Transfer from Hospital, M.C.C.	..	..	..	..	..	..	15
Transfer from Hospital or Institution—other authority	..	..	..	..	..	..	4
Total	..	..	..	..	..	..	<hr/>4,391

Of the above patients, 81·5 per cent. were admitted by the Medical Superintendent.

II.—TABLE SHOWING THE DISTRICTS TO WHICH THE 4,391 PATIENTS BELONGED.

Uxbridge	1,004
Yiewsley and West Drayton	479
Ruislip-Northwood	500
Southall	1,115
Hayes and Harlington	1,106
Other districts of Middlesex	164
Buckinghamshire	23
Total	4,391

NOTE.—The allotment of an accident case to any one of the preceding districts is governed by the following rules :—

- (1) A person admitted, who is normally resident within the County, becomes a case for the district of residence, irrespective of the district in which the accident occurred.
- (2) A person admitted, not being normally resident within the County, becomes a case for the district in which the accident actually occurred.
- (3) A person admitted from and normally resident outside the County becomes a case for the Urban District of Uxbridge, in which the Hospital is situated.

III.—TABLE SHOWING THE RESULTS OF TREATMENT OR THE TERMINATION, WITH ANALYSES OF DEATHS IN AGE AND OTHER GROUPS.

Relieved	3,908 = 89 per cent.
Unrelieved	188 = 4·3 „
Died	295 = 6·7 „

Analysis of Deaths in Age Groups.

Ages.	Male.	Female.	Total.
Under 1.. .. .	43	35	78
1-2	9	4	13
2-5	7	5	12
5-15	11	6	17
15-25	11	11	22
25-35	16	15	31
35-45	18	14	32
45-55	14	15	29
55-65	24	9	33
65-75	10	13	23
Over 75.. .. .	4	1	5
Totals	167	128	295

	Treated.	Per-centage of Total.	Died.	Case Mortality per cent.
Medical cases	1,000	22·8	189	18·9
Surgical and obstetric cases	3,391	77·2	106	3·12

VII.—CLASSIFICATION OF THE DISEASES AND CONDITIONS FOR WHICH THE 4,391 PATIENTS DISCHARGED DURING 1937 WERE PRIMARILY TREATED.

Disease or Condition.	Medical.			Surgical and Obstetric.			Totals.
	Re-lieved.	Unre-lieved.	Died.	Re-lieved.	Unre-lieved.	Died.	
Healthy—							
No abnormality detected	16	—	—	—	—	—	16
Breast-fed infants with mother ..	32	—	—	—	—	—	32
Births	—	—	—	524	—	19	543
Diseases due to infection—							
Erysipelas	3	1	—	—	—	—	4
Gonorrhoea	—	—	—	—	2	—	2
Influenza	39	—	3	—	—	—	42
Measles—morbili and rubella ..	—	—	—	—	—	—	—
Mumps, pertussis and varicella ..	1	—	—	—	—	—	1
Rheumatism, acute and sub-acute ..	28	1	1	—	—	—	30
Rheumatic chorea	7	1	—	—	—	—	8
Syphilis, primary and secondary ..	—	—	—	—	—	—	—
Tuberculosis, pulmonary	13	23	28	—	—	1	65
Tuberculosis, non-pulmonary ..	—	2	6	12	3	3	26
Miscellaneous notifiable	3	1	5	—	2	—	11
Miscellaneous non-notifiable ..	2	—	3	1	1	1	8
Infestations by metazoan parasites ..	1	—	—	—	—	—	1
Diseases of the nervous system—							
Vascular origin	—	—	2	—	—	—	2
Mental diseases	—	1	—	—	—	—	1
Miscellaneous	23	14	3	1	—	—	41
Diseases of the eye	—	—	—	4	—	—	4
Diseases of the ear	—	—	—	108	4	5	117
Diseases of the nose and sinuses ..	1	1	—	10	—	—	12
Diseases of the circulatory system—							
Rheumatic carditis	15	3	10	—	—	—	28
Myocardial degeneration, &c. ..	8	2	1	—	—	—	11
Arterio-sclerosis	9	6	6	—	—	1	22
Veins	—	—	—	15	1	—	16
Miscellaneous	6	5	3	2	—	—	16
Diseases of the blood and spleen ..	4	1	2	—	—	—	7
Diseases of the lymphatic system ..	—	1	—	51	1	—	53
Diseases of the endocrine glands ..	1	1	1	2	1	—	6
Diseases of the breast	—	—	1	22	—	—	23
Diseases of the respiratory system—							
Laryngitis	1	—	—	1	—	—	2
Bronchitis, acute	64	2	—	—	—	—	66
Bronchitis, chronic	4	—	1	—	—	—	5
Pneumonia, primary	58	3	12	1	—	—	74
Bronchopneumonia	65	—	17	—	—	—	82
Pleurisy	33	1	—	—	2	—	36
Miscellaneous	18	—	3	6	1	4	32
Diseases of the teeth and gums ..	—	—	—	11	—	—	11
Diseases of the digestive system—							
Tonsillitis	13	1	—	54	1	—	69
Enlarged tonsils and/or adenoids ..	—	—	—	412	—	—	412
Peptic ulcers	32	2	3	19	—	7	63
Dyspepsia of infants	28	2	28	—	—	—	58
Stomach and duodenum, other ..	29	—	2	6	—	3	40
Appendicitis	—	—	—	178	1	10	189
Visceroptosis, constipation and stasis..	45	1	—	10	—	—	56

Disease or Condition.	Medical.			Surgical and Obstetric.			Totals.
	Re-lieved.	Unre-lieved.	Died.	Re-lieved.	Unre-lieved.	Died.	
Diseases of the digestive system— <i>contd.</i>							
Herniæ	—	—	—	80	2	3	85
Intestine, rectum, anus—other ..	20	—	7	28	5	5	65
Liver and gall bladder	1	—	3	12	—	—	16
Peritoneum	—	—	1	11	1	1	14
Miscellaneous	3	—	—	6	—	—	9
Diseases due to disorders of nutrition or of metabolism	20	2	12	—	—	—	34
Diseases of the generative system—							
Male organs	—	—	—	39	3	2	44
Female organs	—	—	—	95	2	1	98
Pregnancy, parturition and puerperium—							
Normal and abnormal conditions ..	—	—	—	814	—	5	819
Diseases of the organs of locomotion—							
Fibrositis group	4	—	—	6	—	—	10
Arthritis deformans	2	—	—	1	1	—	4
Osteomyelitis, acute and chronic ..	—	—	—	11	5	—	16
Miscellaneous	3	—	1	42	4	—	50
Diseases of the areolar tissue	2	—	—	15	1	1	19
Diseases of the skin	9	3	2	9	—	—	23
Diseases of the urinary organs—							
Nephritis	10	2	14	3	—	—	29
Pyelitis	34	1	—	5	—	—	40
Miscellaneous	2	—	1	62	5	1	71
Injuries—							
Superficial	—	—	—	57	2	—	59
Deep and foreign bodies	—	—	—	8	1	1	10
Shock or other injury	—	—	—	1	—	—	1
Cerebral concussion	—	—	—	49	1	—	50
Cerebral contusion	—	—	—	2	—	1	3
Burns and scalds	—	—	—	20	2	1	23
Wounds, clean and septic	—	—	—	28	1	1	30
Septic conditions of the hand	—	—	—	13	1	—	14
Fractures and dislocations	—	—	—	175	8	14	197
Miscellaneous	—	—	—	4	—	—	4
Tumours, benign—							
Generative system	—	—	—	4	—	—	4
Other organs and structures	—	—	—	7	2	—	9
Tumours, malignant—							
Digestive system	—	—	—	6	12	9	27
Generative system	—	—	—	1	3	1	5
Urinary organs	—	—	—	—	3	2	5
Other organs and structures	—	—	1	5	2	2	10
Tumours, intra-cranial	—	3	—	1	2	—	6
Cysts	—	1	—	10	—	—	11
Malformations, congenital	1	1	3	7	4	1	17
Poisonings	3	—	3	—	—	—	6
Special investigation/treatment	5	1	—	100	5	—	111
Totals	721	90	189	3,187	98	106	4,391

Diseases and Conditions Treated to a Conclusion.

(Grouped in Order of Frequency.)

	Treated.	Died.
Pregnancy, parturition and puerperium	819	5
Diseases of the ear, nose and throat	610	5
Diseases of the digestive system	595	73
Births	543	19
Injuries—general and local	391	18
Diseases of the respiratory system	297	37
Diseases due to infection	197	51
Diseases of the generative system	142	3
Diseases of the urinary organs	140	16
Diseases of the circulatory system	93	21
Diseases of the organs of locomotion	80	1
Tumours	66	15
Diseases of the lymphatic system	53	—
Diseases of the nervous system	44	5
Diseases due to disorders of nutrition or of metabolism ..	34	12
Diseases of remaining groups	287	14
Total treated	4,391	295

Analysis of Fractures and Dislocations Treated to a Conclusion during the Year, together with the Results of In-patient and Out-patient Treatment.

	Nature.		Result.					Totals.
	Simple.	Compound.	Very Good.	Good.	Medium.	Poor.	Died.	
Skull	14	1	12	1	1	1	—	15
„ with concussion	7	4	10	—	—	—	1	11
„ with cerebral contusion	3	3	3	—	—	—	3	6
Vertebræ	5	—	2	2	—	1	—	5
Ribs	2	—	1	—	—	—	1	2
Clavicle	3	—	3	—	—	—	—	3
Scapula	1	—	—	1	—	—	—	1
Humerus	16	1	5	7	5	—	—	17
Radius or ulna or both	14	—	9	5	—	—	—	14
Carpus, metacarpus or phalanges	3	4	2	1	4	—	—	7
Pelvis	5	—	5	—	—	—	—	5
Femur, neck	3	—	1	—	1	—	1	3
„ great trochanter	7	—	1	1	—	—	5	7
„ shaft	9	—	5	2	2	—	—	9
„ lower end	—	1	—	—	1	—	—	1
Patella	1	1	—	1	1	—	—	2
Tibia	11	—	7	4	—	—	—	11
Fibula	4	—	4	—	—	—	—	4
Tibia and fibula, simple	17	—	10	5	—	1	1	17
„ compound	—	9	2	5	2	—	—	9
Tarsus, metatarsus or phalanges	4	—	4	—	—	—	—	4
*Multiple bony injuries, simple	17	—	5	9	3	—	—	17
† „ compound	—	7	—	2	—	—	5	7
Fracture-dislocations, various	9	—	4	3	1	1	—	9
Separated epiphyses	—	—	—	—	—	—	—	—
Dislocations, various	6	—	5	1	—	—	—	6
Pathological, malunited, &c.	5	—	1	3	—	—	1	5
Totals	166	31	101	53	21	4	18	197

* Multiple fractures of the vertebral column, hand and foot and cases of fractured ribs, tibia with fibula and radius with ulna are not included in the group unless associated with one or more fractures or dislocations elsewhere.

Multiple fractures of the bones of the skull, face and nose are not classified as multiple.

† One or more injuries being compound, not necessarily all.

21.6 per cent. of the fractures and fracture-dislocation cases were of the compound variety.

Men	...	...	...	...	...	...	...	115, of whom 9 died.
Women	...	...	...	...	...	...	...	39, of whom 5 died.
Children under 16—male	...	...	...	...	...	...	...	27, of whom 4 died.
Children under 16—female	...	...	...	...	...	...	...	16, of whom none died.

Special Methods applied to the above Cases.

Manipulation under general anæsthesia	..	..	..	..	24
Application of plaster of Paris	..	..	..	..	42
Manipulation under fluorescent screen	..	..	..	..	10
Transfixion pin or wire (including Zimmer apparatus)	..	..	..	..	25
Open operation	..	..	..	..	17
Amputation for compound fracture	..	..	..	..	6

The following compound fracture cases had amputation—1 case of fracture of tibia and fibula (through tibia and fibula); 4 cases of phalanges of hand; 1 case of tibia and fibula—gas gangrene—(through femur).

Results of Treatment.

					1935.			1936.			1937.
					per cent.			per cent.			per cent.
Very good	..	..	..	..	60	48.4		84	45.4	101	51.3
Good	..	..	..	..	30	24.2		49	26.5	53	26.7
Medium or poor	..	..	..	..	21	17.0		34	18.4	25	12.8
Died	..	..	..	..	13	10.4		18	9.7	18†	9.2
Totals					124	100.0		185	100.0	197	100.0

N.B.—The result of treatment is classified as “very good” only when the three following conditions are fulfilled :—

- (1) Little or no depreciation of function.
- (2) Anatomical alignment of fragments.
- (3) No shortening or angulation.

The result of a fracture successfully treated by amputation is classified as medium.

†Cause of death :—

Cerebral contusion	...	...	...	...	...	...	...	...	...	5
Arterio-sclerosis	...	...	...	...	...	...	...	...	...	8
Meningitis	...	...	...	...	...	...	...	...	...	1
Shock and hæmorrhage	...	...	...	...	...	...	...	...	...	2
Septicæmia	...	...	...	...	...	...	...	...	...	1
Duodenal Ileus	...	...	...	...	...	...	...	...	...	1
Total fracture deaths										18

The average length of stay of the 197 fracture and dislocation cases analysed above was 29.2 days.

The above figures relate to the fracture cases treated in hospital. The number is small considering the size of the hospital and the extent of the district.

At this hospital very adequate facilities and equipment exist for the treatment of fractures. The essential conditions of an organized fracture service as enumerated by the Committee on Fractures,* viz., segregation of cases, continuity of treatment, after-care and unity of control, are carried out in the practice of this hospital. All fracture cases are followed up at the Fracture Clinic until a satisfactory result is obtained.

305 fractures in addition were treated entirely as out-patients, making a total of 502 fractures under treatment during the year. The treatment of 45 of these cases was continued into the New Year.

The Work of the Special Departments.

1. Surgical	..	..	..	Major operations	..	..	1,207	
				Minor operations	..	..	2,584	
								3,791
2. Anæsthetics	..	..	..	General	..	..	..	2,156
				Local	..	..	..	686
				Spinal	..	..	..	137
3. Radiological	..	..	..	Patients investigated	..	..	..	2,758
				Investigations	..	..	..	4,307

* Vide Report of Committee on Fractures—Supplement to the *British Medical Journal*, 16th February, 1935.

4. Massage	Patients	612
	Treatments	10,598
5. Electro - Therapeutic and Light	Patients	362
	Treatments	7,563
6. Maternity	Women examined at ante-natal clinic	813
	Attendances at ante-natal clinic	3,468
	Births	574
	*Obstetric operations	240
7. Pathological	Investigations	4,914
8. Ear, Nose and Throat ..	*Operations	677
9. Therapeutic, Diagnostic, Prophylactic.	Special procedures	1,647
10. Casualty and Out-Patients	†Patients	5,742
	Attendances	30,893
	*Operations	1,212
11. Nurses' Sick Room ..	Admissions	63

Note.—Included in the above figures are those of the minor operations, anæsthetics, special treatments and investigations performed on, given to or made on, patients in the casualty, various out-patient departments and nurses' sick room.

1. Department of Surgery.

				In-Patients.		Casualty and Out-Patients.		Nurses.		Totals.
				Major.	Minor.	Major.	Minor.	Major.	Minor.	
<i>General—</i>										
Skin and superficial structures ..				22	128	16	490	—	—	656
Arteries, veins and lymphatics ..				5	22	—	89	—	—	116
Nerves				5	25	—	—	—	—	30
Bones and joints				98	181	3	207	1	—	490
Muscles, tendons, bursæ and fasciæ				9	8	10	9	—	—	36
Amputations				18	1	1	5	—	—	25
Skull, brain and spine				9	3	—	1	—	—	13
Face				1	—	—	—	—	—	1
Eye				1	—	—	32	—	—	33
Mouth, pharynx and œsophagus				5	12	—	14	—	—	31
Thyroid, accessory glands and neck				6	—	—	10	—	—	16
Breast				3	17	—	15	—	—	35
Thorax and contents				101	132	—	5	—	—	238
Abdominal wall and cavity				145	4	—	2	—	—	151
Stomach and duodenum				26	—	—	—	—	—	26
Intestine, rectum and anus				183	63	—	12	1	—	259
Liver, gall bladder, pancreas and spleen				10	—	—	—	—	—	10
Kidney and urinary tract				89	97	—	69	—	—	255
Male generative organs				17	11	—	128	—	—	156
Female generative organs				221	34	—	1	—	—	256
Unclassified				2	36	—	2	1	—	41
				976	774	30	1,091	3	—	2,874
<i>Special—</i>										
Obstetric				47	186	—	7	—	—	240
Ear, nose and throat				150	442	—	84	1	—	677
				1,173	1,402	30	1,182	4	—	
Grand totals				2,575		1,212		4		3,791

* These operations are included in the numbers of major and minor operations and are not additional.
† Ante-natal patients, attendances and operations included.

Operations—

Major	1,207
Minor	2,584

**Operative mortality rates—*

Per 100 major operations	5.0
Per 100 minor operations	0.194
Per 100 major and minor operations	1.63

When the period of anæsthesia for an operation ordinarily classified as minor exceeds half-an-hour, that operation is deemed a major one.

Operations performed on in-patients.	General.	Ear, Nose and Throat.	Total.
By Medical Superintendent	632	69	701
By Deputy Medical Superintendent	541	262	803
†By Resident Assistant Medical Officers	813	262	1,075
Totals.. .. .	1,986	593	2,579

Below are given, under anatomical headings, the names and numbers of the operations most frequently performed.

Skin and Superficial Structures (656)—

Toilet and suturing of wounds	262
Incision of abscess, cellulitis boil or carbuncle	128
Sinus, ulcer, scar, cyst, tumour	78
Septic infections of hand	96
Foreign body in limb/trunk—removal	43

Arteries, Veins and Lymphatics (116)—

Injection of varicose veins	62
For suppurative lymphadenitis	47

<i>Nerves (35)—Miscellaneous</i>	35
--	----

Bones and Joints (490)—

The majority of operations in this section were carried out for the treatment of fractures and dislocations; manipulations of fragments (34) and with the application of plaster of Paris (291) represent the most common operations performed. Miscellaneous on joints (79); transfixion pin or wire (15); open operations for reduction and fixation of fragments (17); for acute osteomyelitis (4); sequestrectomy (16); excision of bone (19).

Muscles, Tendons, Bursæ (36).

Amputations (25)—This total comprises operations on tibia and fibula (2), femur (3), arm (1), and fingers and toes (19).

Skull, Brain and Spine (14)—Includes Albee's graft (1), decompression (1), compound depressed fracture skull (5).

Abdominal Wall and Cavity (151)—

Herniotomy for inguinal herniæ (12 strangulated)	66
„ femoral herniæ (8 strangulated)	14
„ ventral and umbilical herniæ (1 strangulated)	5
Laparotomy—exploratory for adhesiolysis, peritonitis abscess, &c.	47
„ —ileo-cæcal lymphadenitis	11

Mouth, Pharynx and Oesophagus (31)—This total includes pharyngopexy (1).

* Every case on whom any operation, either radical or palliative, was performed is included in the total of operation deaths, on which these mortality rates are based.

† Includes surgeons acting as *locum tenens* for surgeons on leave and holiday.

Thyroid and Neck (16)—includes thyroidectomy (2), branchial cyst (1), operation on salivary glands (11).

Breast (35)—includes incision of mammary abscess (32), removal of breast (3).

Stomach, Duodenum, Intestine, Rectum, Anus, Gall Bladder (295)—

For peptic ulcer (14 perforated)	19
Gastrectomy	3
Rammstedt	1
Enterostomy/colostomy, with/without resection	12
Enterectomy/colectomy	9
Anastomoses—various	4
Appendicectomy	69
„ (Interval—previous Ochsner—Sherren treatment)	24
„ with drainage	57
Intussusception/interal hernia/volvulus	5
Excision of rectum	1
Proctoscopy/sigmoidoscopy (minor operation)	23
For hæmorrhoids (injections—4) (minor operation)	14
Cholecystostomy	3
Cholecystectomy	6
Cholecystogastrostomy	1

Kidney, Ureter, Bladder and Urethra (255)—

Nephrectomy	6
Nephrolithotomy	2
Cystoscopy and ureteric catheterization	61
„ (minor operation)	84
Ureterotomy-Ureterolithotomy	2
Vesical calculus	3
Suprapubic cystostomy	9
Diathermy of vesical neoplasm	6

Male Generative Organs (156)—

Suprapubic prostatectomy	7
Circumcision (minor operation)	120
Varicocele, hydrocele, hæmatocele	15
On testis/vas/vesicles	5

Female Generative Organs (256)—

Ovary and/or tube	15
Ectopic gestation	6
Hysteropexy	1
Uterine, vaginal plugging and/or glycerine injection (minor operation)	11
Incomplete abortion	145
Hysterectomy (Pan—1, vaginal—1)	9
Various on vagina/vulva	18

Thorax and Contents (237)—

Empyema	14
Lobectomy	3
Thoracoplasty	6
Adhesiolysis	21
Artificial pneumothorax	192

Laparotomy was performed 321 times. This number does not include herniotomies for inguinal and femoral herniæ and open operations on the kidney and bladder. 150 laparotomies were for appendicitis. During the year, 147 persons were discharged or died after operations for appendicitis.

ANALYSIS OF OPERATIONS FOR APPENDICITIS PERFORMED ON PATIENTS TREATED TO A CONCLUSION.

	Males.			Females.			TOTALS.		
	Relieved	Died.	Total.	Relieved	Died.	Total.	Relieved.	Died.	Total.
*Acute	40	—	40	21	—	21	61	—	61
,, with local peritonitis ..	16	—	16	5	—	5	21	—	21
,, ,, abscess ..	5	—	5	2	2	4	7	2	9
,, ,, general peritonitis ..	13	4	17	10	1	11	23	5	28
Chronic	1	—	1	2	—	2	3	—	3
†Interval	12	—	12	13	—	13	25	—	25
Totals ..	87	4	91	53	3	56	140	7	147

Operative mortality rate of 119 acute cases—5·9 per cent.

The mortality rate is higher than last year and to a great extent can be attributed to the fact that in five cases admitted with general peritonitis the duration of illness prior to admission was 5, 5, 5, 3, and 2 days, respectively. Another admitted with general peritonitis died of pulmonary embolism 16 days after operation. A seventh case had been ill for five days prior to admission and operation for acute appendix with local abscess.

In 38 cases an appendix abscess was palpable on admission. These received Ochsner-Sherren treatment, and of this number 25 returned for interval appendicectomy. There were no deaths.

2. Anæsthetics.

Analysis of Anæsthetics administered during the Year.

	In-Patients.	Casualty and Out- Patients.	Dental.	Totals.
<i>General Anæsthesia—</i>				
Chloroform, ether or mixture	82	—	—	82
†Ethyl chloride with/without ether ..	133	189	13	335
Nitrous oxide and oxygen	256	191	94	541
Gas, oxygen and ether	1,145	—	—	1,145
‡Pentothal	36	—	1	37
Cyclopropane	2	—	—	2
Vinesthene	—	4	—	4
Evipan	3	1	6	10
<i>Local Anæsthesia—</i>				
Application to mucous membrane ..	79	53	—	132
Freezing with ethyl chloride	7	32	1	40
§Infiltration	339	162	13	514
<i>¶Spinal Anæsthesia—</i>				
By intrathecal injection	137	—	—	137
Total	2,219	632	128	2,979

* Appendices proved by section to be acutely inflamed.
† Cases previously admitted for appendix abscess and which received Ochsner-Sherren treatment.
‡ Supplemented by N₂O, O₂ & E (2) ; N₂O and O₂ (7).
§ Supplemented by N₂O & O₂ (1) ; C and E (1) ; Ether (6).
¶ Supplemented by N₂O (12) N₂O, O₂ & E (6).

Summary.					
General anæsthetics	..	..	..	..	2,156
Local anæsthetics	..	..	..	..	686
Spinal anæsthetics	..	..	..	..	137
Total	..	..	..	..	2,979

Of the general anæsthetics given to in-patients, 220 were administered in the wards.

There was one death under anæsthesia : a man aged 39 died suddenly following the injection of 0·25 per cent. Novecain to induce local anæsthesia. The operation proposed was a thora-coplasty for bronchiectasis.

3. Radiological Department.

In-patients investigated	..	..	..	1,063
Out-patients investigated	..	..	..	1,695
Total patients investigated	..	..	..	2,758

ANALYSIS OF INVESTIGATIONS MADE DURING THE YEAR.

				Appearances.		Totals.
				Normal.	Abnormal.	
Skull for injury, disease or deformity	..	..	..	172	127	299
Chest and contents for disease	..	..	..	386	804	1,190
Alimentary tract	..	..	..	167	193	360
Biliary passages	..	..	..	39	30	69
Urinary system	..	..	..	88	161	249
Generative system	..	..	..	131	33	164
Bones and joints for injury	..	..	..	474	896	1,370
„ „ „ „ disease or deformity	..	..	..	178	264	442
Miscellaneous	..	..	..	38	55	93
Dental	..	..	..	14	57	71
Totals	..	..	..	1,687	2,620	4,307

Special Methods of Investigation.

Barium meals	..	..	..	..	..	314
Barium enemata	..	..	..	..	..	34
Cholecystograms	..	..	..	..	..	29
Injections—Lipiodol/sodium bromide	..	..	..	..	..	52
Pyelograms—retrograde	..	..	..	..	..	51
Urograms—intravenous	..	..	..	..	..	85
Screening the removal of a foreign body	..	..	..	..	..	6
Manipulation and fixation of fracture under fluorescent screen	..	..	..	..	..	31
						602
Average investigations per patient	..	..	..	..	..	1·56
*Radiograms taken	..	..	..	..	..	7,987
*Average radiograms per investigation	..	..	..	..	..	1·85
*Average radiograms per patient	..	..	..	..	..	2·89
Dental radiograms taken	..	..	..	..	..	392
Maternity patients	..	..	..	..	..	43
Ante-natal clinic patients	..	..	..	..	..	116
Ealing tuberculosis dispensary patients	..	..	..	..	..	291

Comparative Table.

		1935.	1936.	1937.
Radiological investigations	..	2,347	3,479	4,307

* Dental radiograms and dental patients included.

4. Massage and 5. Electro-Therapeutic and Light Departments.

No. of Patients.	Massage.			Electro-Therapeutic.			Ultra-Violet Light.		
	In-patients.	Out-patients.	Total.	In-patients.	Out-patients.	Total.	In-patients.	Out-patients.	Total.
Remaining from 1936 ..	9	31	40	3	39	31	—	7	7
Admitted to department ..	169	403	572	24	256	280	6	38	44
Remaining under treatment ..	13	84	97	2	62	64	—	6	6
Treated to a conclusion ..	165	350	515	25	173	247	6	39	45
Treatments	2,662	7,936	10,598	468	6,365	6,833	60	670	730

Medical cases admitted	146	26·5 per cent.
Surgical cases admitted	405	73·5 „
Total cases admitted	551	100·0 „

	1935.	1936.	1937.
Total number of treatments	9,276	13,686	18,161

6. Maternity Department.

I. ANTE-NATAL CLINIC.

Ante-natal sessions held	103
Expectant mothers examined	813
Total attendances	3,468
Average number seen per session	33·6
Average number of attendances per expectant mother	4·3
Women referred for dental treatment.. .. .	119
„ „ „ pathological investigation	245
„ „ „ radiological investigation	116

II. STATISTICAL TABLES AND ANALYSES OF CONFINEMENTS.

Analysis of 567 Deliveries which took place during the year.

						Per cent.
Mother admitted	..	Via ante-natal clinic	..	..	492	86·7
		As an emergency case	..	..	75	13·3
		Total	..	..	567	100·00
Civil State	..	Married	..	..	540	95·3
		Unmarried	..	..	27	4·7
		Total	..	..	567	100·0
Parous State	..	Primipara	..	..	338	59·6
		Multipara	..	..	229	40·4
		Total	..	..	567	100·0
Presentation	..	Vertex—occipito anterior		..	532	
		Vertex—occipito posterior		..	11	
		Breech—uncomplicated		..	20	
		Breech—complicated	..	..	8	
		Transverse	..	..	1	
		Born before admission		..	7	
		Face	..	..	2	
		Total	..	..	581	

There were seven sets of twins—								
Breech—vertex	..	..	..	..	..	..	..	6 sets.
Both breech	..	..	..	..	..	..	..	1 set.

Induction of Labour.

Indication.	Number of Cases that had Induction.		
	Of Premature Birth.	At or After Term.	Totals.
Heart failure	1	—	1
Pyelitis	1	1	2
Maternal toxæmia	19	8	27
Post-maturity	—	24	24
Foetal death	1	—	1
Anencephaly	2	—	2
Disproportion	—	4	4
Extended breech	2	—	2
Obstetric history	4	—	4
Eclampsia	2	—	2
Total	32	37	69

Medical induction of labour was undertaken in 59 cases (10·4 per cent. of labours). In 41 cases it was successful and delivery was by natural forces. Forceps were required in one case.

In 17 cases, when medical induction had failed twice, surgical induction was successful in 13. In the 4 remaining cases, delivery was by forceps. In 10 cases surgical induction without previous medical induction was successful. In 1 case the puerperium was morbid.

There were 60 live births and 9 stillbirths (7 due to maternal toxæmia and 2 to anencephaly) There were 4 neo-natal deaths.

Method of Delivery of the 574 Infants Born.

Method of Delivery.	No. of Births.	Deaths.		
		Maternal.	Fœtal.	Neo-natal.
Natural forces	495	1	18	11
„ „ after induction	38	—	10	4
Manual of extended breech	4	—	1	—
„ „ transverse	—	—	—	—
Embryotomy	1	—	1	—
Forceps	25	1	1	1
Cæsarian section	11	—	—	3
Totals	574	2	31	19

Midwives delivered 523 women.

Medical officers delivered 44 women.

Midwives sought medical assistance for 181 women.

Forceps rate 4·34 per 100 births.

Maternal morbidity rate after forceps 8 per cent.

Anæsthetics given for obstetric purposes 196

Average length of lying-in period in days 10·5

Pregnancy and Labour.

Conditions of both pregnancy and labour normal.. 452 .. 78·7 per cent.

„ „ either or both abnormal 115 .. 20·1 „

Multiple cyesis and labour, normal and abnormal.. 7 .. 1·2 „

Obstetric Operations.

Application of forceps	26
Cæsarian section	10
" " and sterilisation	1
Adherent placenta	4
Manual delivery of complicated breech	4
" " " transverse	—
Surgical inductions	27
Embryotomy	1
Repair of perineum—tear grade 1	76
tear grade 2	65
Versions (ante-natal clinic 7)	20
Placenta prævia	5
Plugging with half breech	1
Total	240

Indications for which Cæsarian sections were done :—

Indication.	Booked.	Emergency.	Totals.
Disproportion	4	—	4
Disproportion and sterilisation	1	—	1
Contracted pelvis and disproportion.. .. .	3	—	3
Placenta prævia	—	3	3
Totals.. .. .	8	3	11

10 classical and 1 lower segment operations ; no maternal or foetal deaths ; 3 neo-natal deaths : (Mongolism, 2 ; atelectasis, 1).

Maternal Morbidity.

The figures given under this head relate to women admitted to the maternity department and to booked cases delivered before admission. Of this group, all who had pyrexia in the puerperium (Ministry of Health standard) and all who died after delivery or undelivered are included as morbid. Cases of abortion and ectopic gestation are not admitted to the department. The maternal morbidity of cases of abortion is given under the head of abortion. One case of ectopic gestation was morbid.

—	Booked.	Emergency.	Totals.
Pyrexial cases	15	5	20
Maternal deaths—pyrexial	1	—	1
" " —apyrexial	1	—	1
Pyrexial cases and maternal deaths	17	5	22
Number of women delivered	492	75	567
Maternal morbidity-rate per 1,000 delivered	34·5	66·6	38·8

Pyrexia in the Puerperium.

The Ministry of Health standard of puerperal pyrexia is adopted. Unless there is definite evidence to the contrary, every case of pyrexia occurring in the puerperium is assumed to be due to uterine infection. In addition to the conditions generally accepted as sequelæ of uterine infection, the following, when they occur in the puerperium, are returned also under that head : thrombosis, thrombo-phlebitis, phlegmasia alba dolens, pulmonary embolus, pneumonia and broncho-pneumonia. During the year, 20 cases of pyrexia in the puerperium occurred ; 19 recovered and were discharged and 1 died.

Analysis of the 20 Puerperal Pyrexia Cases.

Register No. †	Age.	Gravida.	Maturity (weeks).	Method of Delivery.	Complication of Labour and/or Maternal Complication.	*Pyrexia.		Cause of Pyrexia.	Cervical Swabbing.	Duration of Pyrexia. †	Births. §
						Date of Onset.	Day of Puerperium.				
186B	30	3	40	Natural forces	Nil	1937. 24th Jan. ...	4	Influenza ...	—	4	Live.
258E	34	1	40	"	Nil	16th Jan. ...	2	Sapraemia ...	Haemolytic streptococci ...	7	"
393B	20	1	40	"	Nil	2nd Feb. ...	5	"	"	2	"
455E	28	1	36	"	Eclampsia...	5th March...	2	Sapraemia; pyelitis	"	4	S.B.M.
469B	22	1	36	"	Placenta praevia	28th Feb. ...	3	Sapraemia ...	"	7	P.
542B	38	1	40	Cæsarian	Contracted pelvis	2nd Feb. ...	1	Pelvic peritonitis	"	28	Live.
853B	16	1	40	"	Trial labour	28th Apr. ...	8	Sapraemia ...	B. col. Staphylococci	10	"
858B	23	1	40	Natural forces	Nil	27th Apr. ...	8	Breast abscess	Staphylococci albus ...	10	"
932B	24	1	40	"	Nil	14th May ...	2	Pyelitis ...	B. coli; Staphylococcus albus...	6	"
950B	25	1	40	"	Nil	21st Apr. ...	7	"	"	10	"
1036B	23	1	40	Forceps	Disproportion	15th May ...	1	Septicæmia	Haemolytic streptococci ...	29	"
1051E	33	2	40	Cæsarian	Placenta praevia	24th May ...	1	Pelvic cellulitis; femoral thrombosis	Staphylococcus albus ...	49	"
1115B	32	1	40	Forceps	Disproportion	6th June ...	1	Sapraemia ...	Haemolytic streptococci ...	6	"
1154E	21	1	35	Natural forces	Nil	10th June...	3	"	Pneumo. staph. albus ...	5	"
1172B	22	1	40	"	Nil	1st June ...	2	Paratyphoid C.	—	6	"
1791B	25	1	40	"	Nil	8th Sept. ...	5	Pyelitis ...	Gram. -ve bacilli	4	"
1686B	23	1	40	"	Nil	4th Aug. ...	9	Breast abscess	Smegma bacillus	3	"
1954B	35	1	40	Cæsarian	Disproportion	24th Sept...	2	Sapraemia ...	—	4	"
2463E	28	1	40	Forceps	Persistent occipito posterior. Failed forceps	14th Oct. ...	2	Sapraemia; recto-vaginal fistula	—	28	"
2518B	23	1	40	Natural forces	Nil	20th Dec. ...	1	Enteritis ...	—	2	"

* Date and day of the second recording of a temperature of 99° F. or over. In every case the date given here is earlier than that on which the pyrexia became notifiable.
† Temperature 100° after delivery. ‡ E. after a register number indicates an emergency case. § S.B.M.—Still birth, macerated. P.—Premature

Summary of the 20 Pyrexial Cases.

Uterine infection	..	..	..	..	9
Pyelitis ..	..	..	..	..	3
Pelvic cellulitis	..	..	..	..	2
Septicæmia	..	..	..	..	1
Breast abscess	..	..	..	..	2
Enteritis ..	..	..	..	..	1
Paratyphoid C.	..	..	..	..	1
Influenza ..	..	..	..	..	1
Total ..	..	..	..	..	20

Maternal Deaths.

Register No.	Age.	Gravida.	Maturity (weeks)	Complication of Labour and/or Maternal Complication.	Method of Delivery.	*Class I	*Class II	*Group I	*Group 2	Births.
1036B.	23	1	40	Septicæmia	Forceps	Yes	—	—	Yes	Live.
1064B.	29	2	40	Post-partum hæmorrhage	Natural forces	Yes	—	—	Yes	S.B.

Maternal Mortality Rates.

Per 1,000 booked cases delivered..	..	..	..	4.06
Per 1,000 emergency cases delivered	..	..	..	0
Per 1,000 cases delivered .. ..	..	..	..	3.5

* *Vide* Final Report of Departmental Committee on Maternal Mortality and Morbidity, 1932. Class I.—Deaths directly due to child-bearing (abortions and ectopics are not included here); Class II.—Death due to an independent disease. Group I.—Cases showing a primary avoidable factor; Group 2.—Cases showing no primary avoidable factor.
† B. after a register number indicates a booked case.

Indications for Forceps Deliveries.

Indication.	Booked.	Emergency.	Total.
Disproportion and P.O.P.	5	5	10
„ Trial labour	1	—	1
„ Rigid soft parts	1	—	1
„ Foetal distress	2	—	2
„ Uterine inertia	3	2	5
Maternal distress. Small outlet	2	—	2
P.O.P., postmaturity	1	1	2
Rigid cervix	2	—	2
Uterine inertia, first twin	1	—	1
Totals	18	8	26

III.—MATERNITY DEPARTMENT, INFANTS' REPORT.

Births.

	Per cent.
Full-time	504 87·8
Premature	39 6·8
Stillborn	31 5·4
Total births	574 100·0

Average weight at birth of infants—booked cases ..	7 lbs. 6¼ ozs.
„ „ „ „ „ —emergency cases ..	6 lbs. 12¼ ozs.
Infants not entirely breast-fed	88

Stillbirths.

DETAILS OF 31 STILLBIRTHS.

Maternal Complication.	Method of Delivery.	Infant.*	Cause of Death.
<i>Booked (24)—</i>			
Toxæmia	Natural forces after surgical induction	P.	Maternal toxæmia.
Nil	Natural forces	F.T.	Fœtal distress.
Toxæmia	"	P.	Prematurity ; maternal toxæmia.
Twins	"	P.M.	Maceration of first twin.
Toxæmia	"	P.	Prematurity ; maternal toxæmia.
"	Natural forces after surgical induction	P.	" "
Nil	Natural forces	F.T.M.	Macerated. No cause discovered.
Toxæmia	"	F.T.	Maternal toxæmia.
Extended breech	Manual	F.T.	Cerebral hæmorrhage.
Nil	Natural forces	F.T.	None discovered.
Nil	"	P.	"
Rigid cervix embryotomy	Embryotomy	F.T.	Embryotomy.
Nil	Natural forces after surgical induction	P.	Anencephaly.
Toxæmia	Natural forces	P.	Prematurity ; maternal toxæmia.
"	Forceps	F.T.	Maternal toxæmia.
"	Natural forces	F.T.	Prolapsed cord.
Nil	"	F.T.	"
Toxæmia	"	P.	Prematurity ; maternal toxæmia.
Placenta prævia	Natural forces after Willett's forceps	F.T.	Separation of placenta.
Toxæmia	Natural forces after surgical induction	P.	Maternal toxæmia.
"	Natural forces	P.	Prematurity ; maternal toxæmia.
Eclampsia	Natural forces after surgical induction	P.	" "
Nil	" "	P.M.	No cause discovered (macerated).
Nil	Natural forces	F.T.	Microcephaly.
<i>Emergency (7)—</i>			
Eclampsia	Natural forces	P.	Maternal toxæmia.
Toxæmia	Natural forces after surgical induction	P.	Prematurity ; maternal toxæmia.
Eclampsia	Natural forces	P.	" "
Breech	"	F.T.	Cerebral hæmorrhage.
Transverse presentation	"	P.	Prolapsed cord.
Nil	"	P.	Prematurity, prolapsed cord.
Acute hydramnios	Natural forces after surgical induction	P.	Anencephaly.

* F.T. = Full-time. F.T.M. = Full-time macerated. P. = Premature. P.M. = Premature macerated.

SUMMARY OF CAUSES OF STILLBIRTH

Cause of Stillbirth.	Booked.	Emergency.	Total.
Maternal conditions	12	3	15
Complication of labour	5	3	8
Placental conditions	1	—	1
Fœtal conditions	2	1	3
Unknown	4	—	4
Totals	24	7	31

Neo-natal Deaths.

DETAILS OF THE 19 NEO-NATAL DEATHS (DEATHS WITHIN 4 WEEKS OF BIRTH).

Cause of Death.	Maternal Complication.	Method of Delivery.	Weight at Birth.	Age.
<i>Booked (11)—</i>			lbs. ozs.	
Prematurity	Disseminated sclerosis	Natural forces ...	2 12	10 days.
„	Pyelitis	Natural forces after induction	2 8	2½ hours.
Prematurity ; maternal toxæmia	Eclampsia	„ „	2 8	24 „
Prematurity	Pyelitis	„ „	2 10	12 „
Prematurity ; congenital atelectasis	Toxæmia	„ „	4 2	36 „
Prematurity	Nil	Natural forces ...	2 12	13 „
Congenital atelectasis	Nil	„ ...	7 2	18 „
Meningocele	Nil	„ ...	7 3½	1 day.
Congenital atelectasis	Nil	„ ...	6 8	3 days.
Gastro-enteritis ; cleft palate	Nil	„ ...	8 6	19 „
Gastro-enteritis ; gas gangrene	Toxæmia	Forceps	7 5	28 „
<i>Emergency (8)—</i>				
Prematurity ; congenital atelectasis	Placenta prævia	Cæsarian	3 8	20 hours.
Prematurity	„ „	Natural forces ...	2 9	10 „
„	Nil	„ ...	2 0	12 „
Prematurity ; broncho-pneumonia	Influenza ; pleurisy... ..	„ ...	3 7½	10 days.
Prematurity ; cleft palate	Nil	„ ...	3 9	7 hours.
Prematurity	Influenza	„ ...	—	14 „
Mongolism ; broncho-pneumonia ; prematurity	Placenta prævia	Cæsarian	5 7	15 days.
Mongolism ; bronchitis	„ „	„	6 5	4 „

SUMMARY OF CAUSES OF NEO-NATAL DEATHS.

—	Booked.	Emergency.	Total.
Prematurity	6	6	12
Congenital atelectasis	2	—	2
Mongolism. Bronchitis	—	2	2
Gastro-enteritis	2	—	2
Meningocele	1	—	1
Total	11	8	19

Infantile Mortality Rates.

	Per cent.
Of 574 infants born, 31 were stillborn and 19 died	= 8·7
Of 543 infants born alive, 19 died within 4 weeks of birth	= 3·5
Of 39 premature infants born alive, 12 „ „ „	= 30·8

IV.—ANALYSIS OF CASES OF NORMAL AND ABNORMAL PREGNANCY, PARTURITION AND PUERPERIUM
TREATED TO A CONCLUSION IN MATERNITY AND OTHER WARDS DURING THE YEAR.

	Booked.	Emergency.	Totals.
Pregnancy, normal	8	—	8
„ and spurious labour pains	16	—	16
Toxæmia of pregnancy	3	3	6
Ectopic gestation	—	4	4
Pregnancy and ante-partum hæmorrhage	2	2	4
„ „ concomitant disease	4	22	26
Abortion, threatened	2	13	15
„ incomplete and complete	—	142	142
„ with post-abortion infection sequelæ ..	—	6	6
„ therapeutic	4	—	4
Labour normal	412	50	462
„ „ and toxæmia of pregnancy	39	11	50
„ „ and concomitant disease	8	1	9
„ abnormal	24	11	35
„ „ and toxæmia of pregnancy	3	1	4
„ multiple, normal and abnormal	7	—	7
Puerperium, normal	4	7	11
Affections consequent on parturition	—	10	10
Totals	536	283	819

Among the 819 cases analysed above, there occurred 5 deaths. Details of 2 of these are given under the head of maternal deaths. The remaining three occurred in emergency cases :—

- 1 general peritonitis following abortion ; 1 ruptured ectopic gestation ; 1 acute yellow atrophy after delivery (admitted as such).

Abortion.

(Therapeutic inductions and cases of threatened abortion are not included.)

Cases treated to a conclusion	148
Pyrexial cases	5
Deaths (ectopic gestation 1)	2
	—
Pyrexial cases and deaths	7
	—
Maternal morbidity rate per 1,000 women who aborted	47.3

7. Pathological Department.

Analysis of Examinations made during the Year.

Examination made at	Bacteriology.										Biochemistry.																						
	Blood culture.	Cerebrospinal fluid.	Urine.	Fæces.	Exudates.	Pus.	Sputum.	Swabbings.	Films for gonococci.	Animal inoculations.	Blood.								Cerebrospinal Fluid.						Urine.				Fæces.		Test meal—fractional.	Stomach contents	
											Sugar.	Sugar tolerance curve.	Urea.	Calcium.	Phosphorus.	Uric acid.	Icterus index.	Van den Bergh.	Other.	Protein.	Globulin.	Chloride.	Sugar.	Urea.	Lange Test.	Sugar estimation.	Urea estimation.	pH.	Other.	Occult blood.			Fat analysis.
Hillingdon County Hospital	29	56	66	64	60	62	191	872	60	—	22	10	77	—	1	1	1	1	7	2	80	70	60	74	5	—	3	27	79	13	89	2	16
West Middlesex County Hospital	1	24	1	16	21	10	2	18	12	11	—	—	—	1	—	—	—	—	—	—	18	10	24	1	—	27	—	—	—	—	—	—	
Totals	30	80	67	80	81	72	193	890	72	11	22	10	77	1	1	1	1	7	2	98	80	84	75	5	27	3	27	79	13	89	2	16	

Examinations made at	Other Clinical Pathology.																			Morbid Anatomy.						
	Hæmatology.						Serology.								General and Microscopic Examinations.					Histo-logical Examinations.	Post-Mortem Examinations.					
	Full count.	Red cells and hæmoglobin	White cell count—differential.	Reticulocyte count.	Platelet count.	Sedimentation rate.	Blood grouping.	Blood compatibility.	Widal reaction.	Bacterial agglutination.	Complement fixation.	Wassermann reaction—blood	Wassermann reaction—C.S.F.	Schick reaction.	Friedman test.	Urine.	Fæces.	Cerebrospinal fluid.	Exudates and other fluids.	Parasitic infection.	Other examinations.	Surgical specimens.	Post-mortem specimens.			
																						Hospital cases.	Other cases.	Institution cases.		
Hillingdon County Hospital	133	128	78	11	2	38	145	1	17	3	—	—	—	4	—	942	21	83	57	19	4	—	86	4	28	
West Middlesex County Hospital	17	2	5	—	—	—	—	—	12	—	1	508	32	—	37	2	2	23	23	8	—	113	28	—	—	
Totals	150	130	83	11	2	38	145	1	29	3	1	508	32	4	37	944	23	106	80	27	4	113	28	86	4	28

Summary of Examinations made during the Year.

	At Hillingdon County Hospital.	At West Middlesex County Hospital.	Totals.
Bacteriological	1,460	116	1,576
Biochemical	639	81	720
Other clinical pathology	1,687	672	2,359
Morbid anatomy	118	141	259
Total	3,904	1,010	4,914

Post-mortem examinations :—

On the bodies of 295 persons who died in Hillingdon Hospital, 88 examinations were made. The remaining 30 examinations were made on bodies from the Hillingdon Institution, on persons brought in dead and on still-born infants.

Hospital autopsy rate—29·5 per cent.

Actual specimens sent (and cases for post-mortem) :—

	1936.	1937.
Hillingdon County Hospital	1,275	3,273
West Middlesex County Hospital (Group Laboratory for Southern District.)	1,157	917

NOTE.—A serial group investigation, such as a fractional test meal, blood sugar curve, urea concentration test and Widal reaction for the whole enteric group, with b. abortus, is entered as one investigation. A routine investigation of cerebro-spinal fluid is entered under three headings, viz., bacteriological, biochemical and microscopic.

8. Ear, Nose and Throat Department.

Analysis of Operations Performed during the Year.

Aural furuncle, foreign body in ear	6
Paracentesis tympani	46
Mastoidectomy (Schwartz 46 ; radical 14)	60
Mastoid cauterization/curettage/plastic	4
Aural/mastoid—examination/dressing under G.A.	2
Submucous resection of septum	2
Nose and sinuses, various	28
Antral puncture and washout	4
*Removal of tonsils and adenoids	437
Removal of tonsils by dissection	54
Ligation of tonsillar fossa	2
Quinsies opened	6
F.b. in pharynx—removal	2
Direct laryngoscopy	3
Bronchoscopy	21
Total	677

Operative Mortality.—There were five deaths. A child of 4, following operation for mastoiditis and drainage of cerebral abscess, developed diphtheria and died. Another aged 7 with Gradenigo's syndrome died after operation. A boy of 2½ died of subdural and cerebral abscess after operations for mastoiditis and cerebral abscess. A girl of 5 died of pneumococcal meningitis after operation for bilateral pneumococcal mastoiditis. A woman, aged 20, died of lung abscess following a radical mastoidectomy.

* This total includes 24 major operations. In children, tonsils are removed by dissection and for purposes of classification, the removal of tonsils in children under or over the age of 12 years is deemed a minor or major operation.

9. Therapeutic, Diagnostic and Prophylactic Procedures.*

Analysis of Special Procedures.

	Theatre.	Wards.	Out-patient Department.	Total.
Injection of serum or vaccine	2	170	302	474
„ saline, subcutaneous or intraperitoneal	—	276	—	276
Multiple punctures of œdematous legs	—	2	—	2
Autohæmotherapy	—	5	1	6
Blood transfusion (auto- or hetero-)	30	33	1	64
Intravenous injection of saline or drug	4	87	124	215
Venesection	—	1	—	1
Lumbar puncture	1	153	1	155
Inhalation therapy	—	—	—	—
Paracentesis (thoracis) of pleural cavity	5	80	—	85
„ (abdominis) of abdominal cavity	—	6	1	7
Gastric lavage	—	118	—	118
Jennerian vaccination	—	13	163	176
CO ₂ snow	—	—	41	41
Spuman insertion	1	—	25	26
Cisternal puncture	—	1	—	1
Total	43	945	659	1,647

10. Casualty and Out-Patient Department.

†Casualties—medical and surgical	4,565
In-patients made out-patients	772
Ante-natal cases	831
Total casualties and out-patients treated	6,168
Patients on books at the beginning of the year	459
New casualties and out-patients	5,709
Total	6,168

Clinic.	Patients.	Attendances.
Post-natal	186	270
Ante-natal	831	3,652
‡Massage	426	7,790
Orthopædic	452	3,574
Medical	765	2,218
Ear, Nose and Throat	906	2,595
Surgical (i)	1,701	5,528
„ (ii)	1,327	5,266
Totals	6,168	30,893§

Total number of attendances made	30,893
Average number of attendances per patient	5.0

* None of these has been included in the foregoing list of operations.
† Includes patients referred by medical practitioners for a specialist's opinion and/or some special investigation or form of treatment.
‡ Not included in the total number of patients owing to the fact that they have been referred from other clinics.
§ Only one attendance is included for 950 patients who attended more than one clinic during their visit to hospital.
(C 7370)T o

Operations—

Suturing of wound	237
Incision of abscess	87
For sinus/ulcer/cyst/tumour, &c.	62
Removal of nail	27
For septic infection of hand	79
Removal of foreign body in eye	32
" " " " " limb	38
Injection of varicose veins, &c.	62
Manipulation of fracture or dislocation	26
Manipulation/application of plaster of Paris.. .. .	143
Miscellaneous on tendons/bursæ	19
Miscellaneous on joints	25
Amputation of finger, thumb, toe	6
Ear, nose and throat, various	84
On mouth, pharynx and œsophagus	14
Mammary abscess	15
Genito-urinary, various	198
External version in ante-natal clinic	7
Sequestrectomy	15
On submaxillary gland	10
Miscellaneous	26

Total 1,212

Anæsthetics—general 385

Anæsthetics—local 247

Total 632

Admitted to hospital from out-patient department 1,277

Admitted to hospital from ante-natal clinic 492

11. Nurses' Sick Room.

Complement of nurses at 31st December	102
Average daily complement of nurses	96.3*
" " " " " available for duty	92.7
Nurses off sick during the year	47†
Nursing days lost	1,310
Average number of nursing days lost per annum—	
Per sick nurse	27.9
Per nurse of the average daily complement	13.60

Disabilities.	No.	Major operations.	Minor operations.
Ear, nose and throat conditions	21	1	—
Influenza	10	—	—
Alimentary tract	9	1	—
Diseases of the chest	8	—	—
Notifiable diseases	4	1	—
Skin	3	—	—
Injuries	3	1	—
Pulmonary tuberculosis	2	—	—
Heart	1	—	—
Kidneys	1	—	—
Metabolism	1	—	—
Totals	63	4	—

Out of a total of 1,310 days lost, 6 nurses were off duty a total of 713 days.

* The disparity between this and the first figure is due to the increase of staff required when the new extensions were opened on 1st December.

† One nurse off duty four times, two nurses off duty three times, and nine nurses off duty twice.

Comparative Tables.

	1935.	1936.	1937.
Beds—complement at 31st December	141	141	141
„ —average daily complement	141	141	141
„ —average daily number available	141	140·5	140·9
„ —average daily number occupied	135·3	158·3	177·5
Average daily percentage of available beds occupied ..	96	112·7	125·9
Patients per occupied bed—average number per annum ..	22·7	24·8	24·7
Nursing staff—average daily complement	69·4	75·6	96·3
Occupied beds—average number per nurse	2	2·1	1·8
Admissions—average daily number	8·5	10·6	12
„ —percentage by Medical Superintendent ..	51·8	77·3	81·5
Length of stay—average in days per patient	16·1	13·8	14·8
Medical cases	806	872	1,000
Surgical cases	2,262	2,991	3,391
Total cases treated to a conclusion	3,068	3,863	4,391
Patients relieved (per cent.)	90	90·7	89
„ unrelieved („ „)	3·2	4·2	4·3
„ died („ „)	6·8	5·1	6·7
Operations—major	834	1,049	1,207
„ —major and minor	2,423	3,299	3,791
Anæsthetics—general	1,551	1,881	2,156
Therapeutic procedures	1,275	1,474	1,647
Radiological investigations	2,347	3,479	4,307
Massage treatments	5,385	7,873	10,598
Electro-therapeutic and light treatments	3,891	5,813	7,563
Ante-natal clinic—women examined	440	573	813
„ „ „ —attendances	1,609	2,926	3,468
Confinements	304	421	567
Maternal mortality rate per 1,000 delivered	13·2	7·12	3·5
Maternal morbidity „ „ „ „	75·5	59·4	38·8
Births	315	426	574
Stillbirth rate	6·7	5·6	5·4
Infantile mortality rate per 100 total births	9·23	6·7	8·7
„ „ „ „ 100 born alive	2·72	1·2	3·5
Pathological investigations	2,767	2,958	4,914
Casualties and out-patients	3,078	4,967	5,742
Casualty and out-patient attendances	15,023	23,976	30,893

APPENDIX V.

ANNUAL REPORT OF THE MEDICAL SUPERINTENDENT ON THE WORK OF
WEST MIDDLESEX COUNTY HOSPITAL FOR THE YEAR 1937.

Staff

WHOLE-TIME MEDICAL STAFF.

Medical Superintendent—

J. B. Cook, M.D., Ch.B., D.P.H.

Deputy Medical Superintendent—

Miss M. W. Warren, M.R.C.S., L.R.C.P.

*Physicians—*T. S. Nelson, M.A., F.R.C.P.
M. M. Deane, M.R.C.P., D.P.M.*Surgeon—*

W. J. Ferguson, M.S., F.R.C.S.

Obstetric Surgeon—

D. M. Stern, M.A., F.R.C.S., M.C.O.G.

*Pathologists—*W. Broughton-Alcock, B.A., M.B.
A. C. Counsell, M.B., B.S., D.P.H.*Assistant Medical Officers—*G. Stephen, M.B., Ch.B., F.R.C.S.
Miss I. M. Titcomb, B.M., B.Ch.
F. J. V. Jaensch, M.R.C.P., M.R.C.S.
Miss S. Whitaker, M.B., B.S.J. A. Brocklebank, M.D., M.R.C.P.
W. R. Merrington, M.B., B.S., F.R.C.S.
D. A. Davies, M.B., B.S.*Anæsthetist—*

A. H. L. Baker, L.M.S.S.A., D.A.

Casualty Officer—

A. B. McLean, M.B., B.S.

VISITING MEDICAL STAFF.

Electro-Therapeutist—

C. A. Robinson, B.A., M.B., B.Ch., D.M.R.E.

Radiologist—

D. G. Arthur, M.R.C.S., L.R.C.P.

Ophthalmic Surgeon—

F. W. Law, M.A., M.D., F.R.C.S.

Orthopædic Surgeon—

P. Wiles, F.R.C.S.

Psychiatrist—

R. Worth, O.B.E., M.B., B.S.

Dental Surgeon—

H. W. Breese, M.R.C.S., L.R.C.P., L.D.S.

NURSING STAFF—

*Matron—*Miss E. Huggins

Nurses (including midwives and male nurses), 552.

OTHER STAFF.

*Steward—*Mr. J. F. Lomer.*Pharmacist—*Miss E. Bristowe.*Almoner—*Miss D. Myer.*Chaplain—*Rev. P. W. Shepherd-Smith, M.A.

Classification of Accommodation.

	Males.	Females.	Children.	Totals.
Medical	52	82	—	134
Surgical	101	88	—	189
Chronic Sick ..	202	364	—	566
Children	—	—	139	139
Tuberculosis ..	16	17	—	33
Isolation	—	—	16	16
Maternity	—	79	—	79
„ Cots	—	—	79	79
Mental	44	84	2	130
Totals	415	714	235	1,365

Statistical Tables for the year ended 31st December, 1937.

Remaining in hospital on 1st January, 1937	1,288
Admitted during the year	10,186
Born in hospital	1,793
	----- 13,267
Discharged	10,478
Died	1,474
Remaining in hospital on 31st December, 1937	1,315
	----- 13,267
Highest number of patients—1,373—20th December.	
Lowest „ „ „ —1,236—7th March.	

I.—TABLE SHOWING HOW THE 11,979 CASES WERE ORIGINALLY ADMITTED.

By Almoner or Relieving Officer	2,903
By Medical Superintendent	6,929
Births	1,793
Transfers from Middlesex County Council institutions or homes	354
Total	----- 11,979

II.—DISTRICTS FROM WHICH THE 11,979 CASES WERE ADMITTED.

Acton	65	Sunbury	125
Brentford and Chiswick	1,708	Twickenham	1,922
Ealing	3,036	Other districts of Middlesex ..	2,425
Heston and Isleworth	2,698		
Total	11,979.		

III.—TABLE SHOWING WHITHER THE 11,952 PATIENTS WERE DISCHARGED.

Home	9,419
Middlesex County Council's institutions or homes	198
Convalescent home	287
Other authorities' hospitals and institutions	21
Infectious diseases hospital	13
Sanatoria	75
Voluntary hospitals	8
Mental hospital	284
Duty (staff)	173
Died	1,474
Total	11,952

DURATION OF STAY OF PATIENTS IN HOSPITAL.

Under four weeks	8,947
4 weeks and under 13 weeks	2,309
13 weeks or more	696
Total	11,952

IV.—AGE AND SEX DISTRIBUTION OF PATIENTS WHO DIED DURING THE YEAR.

Ages.	Males.	Females.	Total.
Under 1 year	66	45	111
1-5 years	17	12	29
5-10 „	5	2	7
10-15 „	10	2	12
15-20 „	11	7	18
20-30 „	26	40	66
30-40 „	40	32	72
40-50 „	50	48	98
50-60 „	114	83	197
60-70 „	188	131	319
70-80 „	195	155	350
Over 80 „	65	130	195
Totals	787	687	1,474

Deaths within 24 hours of admission	206
„ 48 „	101
„ 72 „	55
All other deaths	1,112
Total	1,474

V.—CLASSIFICATION OF DISEASES AND CONDITIONS FOR WHICH 11,952 PATIENTS WERE
PRIMARILY TREATED.

Disease or Condition.	Children (under 16).			Males.			Females.			Total.
	Relieved.	Unrelieved.	Died.	Relieved.	Unrelieved.	Died.	Relieved.	Unrelieved.	Died.	
Acute infectious diseases ..	91	—	4	23	—	5	41	—	1	165
Influenza	3	—	—	18	—	14	11	—	6	52
Tuberculosis—										
Pulmonary	5	—	—	60	—	38	51	—	17	171
Non-pulmonary	6	—	9	6	—	4	10	—	3	38
Malignant disease	—	—	—	37	—	107	59	—	91	294
Rheumatism—										
Acute	9	—	1	12	—	—	13	—	1	36
Non-articular	1	—	—	11	—	—	11	—	1	24
Chronic arthritis ..	—	—	—	27	—	2	35	—	2	66
Abortion and miscarriage	—	—	—	—	—	—	224	—	2	226
Other conditions of pregnancy	—	—	—	—	—	—	73	—	2	75
Diseases of the—										
Eye	14	—	—	17	—	1	7	—	—	39
Ear	107	—	1	10	—	1	11	—	1	131
Tonsils and adenoids ..	294	—	—	38	—	3	65	—	1	401
Nervous system	30	—	13	93	—	31	91	—	35	293
Circulatory system ..	11	—	15	154	—	222	204	—	263	869
Blood, spleen and lymphatics	26	—	—	15	—	5	28	—	3	77
Respiratory system ..	201	—	39	264	—	101	259	—	47	911
Teeth and gums	10	—	—	12	—	—	23	—	—	45
Digestive system	227	—	23	508	—	41	552	—	32	1,383
Nutrition and metabolism	28	—	33	58	—	33	89	—	61	302
Generative system ..	9	—	—	39	—	8	232	—	6	294
Bones	19	—	1	24	—	3	32	—	2	81
Skin and areola tissue ..	148	—	1	169	—	5	148	—	6	477
Urinary system	25	—	2	89	—	40	122	—	15	293
Malformations and cysts ..	81	—	12	14	—	—	6	—	—	113
Injuries	86	—	5	271	—	24	152	—	20	558
Poisonings	3	—	—	12	—	1	9	—	3	28
Mental diseases	8	—	—	134	—	1	230	—	1	374
Venereal diseases	—	—	—	7	—	—	3	—	1	11
Puerperal pyrexia	—	—	—	—	—	—	25	—	1	26
„ fever	—	—	—	—	—	—	23	—	1	24
Infants with mothers ..	52	—	—	—	—	—	—	—	—	52
Mothers and infants discharged from maternity wards	1,765	—	—	—	—	—	2,116	—	—	3,881
No disease	142	—	—	—	—	—	—	—	—	142
Totals	3,401	—	159	2,122	—	690	4,955	—	625	11,952

Department of Surgery.

ANALYSIS OF OPERATIONS PERFORMED IN THE THEATRE DURING THE YEAR.

Operations.	Major.	Minor.	Total.
<i>On head and neck—</i>			
Trephine of skull	4	—	4
Mastoidectomy	75	—	75
Dissection of tonsils and adenoids	369	—	369
Guillotine removal of tonsils and adenoids	—	2	2
Sub-mucous resection, turbinectomy	—	1	1
For nasal polypi—ethmoiditis, sub-mucous resection	—	3	3
Antrostomy	1	—	1
For hare lip	—	1	1
Removal of eye	6	—	6
Lens extraction	4	9	13
Iridectomy	—	4	4
Myringotomy	—	12	12
Tracheotomy	—	2	2
Dissection of neck glands	—	1	1
Partial thyroidectomy	6	—	6
<i>On Thorax—</i>			
For breast abscess	—	33	33
For breast tumour	7	—	7
Rib resection	23	—	23
Thoracoplasty	5	—	5
<i>On Abdomen—</i>			
<i>For Hernia—</i>			
Femoral	17	—	17
Inguinal	67	—	67
Umbilical	12	—	12
Ventral	5	—	5
<i>On Stomach and Duodenum—</i>			
For perforation of ulcer	32	—	32
Gastrostomy	1	—	1
Gastro-enterostomy	15	—	15
Partial gastectomy	2	—	2
Rammstedt's operation	4	—	4
<i>On Biliary Passages—</i>			
Cholecystectomy	26	—	26
Cholecysto-gastrostomy	2	—	2
<i>On Small Intestine—</i>			
Adhesiolysis	24	—	24
Enterostomy	1	—	1
For ruptured small intestine	1	—	1
<i>On Appendix—</i>			
Appendicectomy with drain	84	—	84
„ without drain	356	—	356
Appendicostomy	2	—	2
Drainage of appendix abscess	14	—	14
<i>On Large Intestine—</i>			
Resection	7	—	7
Caecostomy	7	—	7
Colostomy	25	—	25
Reduction of intussusception	4	—	4
Sigmoidoscopy	1	49	50
For fissure in ano	—	1	1
„ fistula in ano	—	2	2
Haemorrhoidectomy	9	9	18
For ischio-rectal abscess	—	7	7
<i>Laparotomy —</i>			
For general peritonitis	15	—	15
„ tubercular peritonitis	1	—	1
„ inoperable carcinoma	13	—	13
Splenectomy	2	—	2
Pancreatitis	2	—	2
Presacral neurectomy	1	—	1

Operations.	Major.	Minor.	Total.
<i>Gynaecological—</i>			
Hysterectomy	24	—	24
Hysterotomy and sterilization	6	—	6
Myomectomy	2	—	2
Dilation and curettage	65	—	65
For ectopic gestation	7	—	7
Salpingectomy	13	—	13
Oöphorectomy	22	—	22
Colpo-perineorrhaphy	7	—	7
Emptying of uterus	—	98	98
Intra-uterine douche	—	218	218
For recto-vaginal fistula	1	—	1
„ retroverted uterus	1	—	1
<i>On Male Genital Organs—</i>			
For hydrocele	8	—	8
„ varicocele	1	1	2
„ undescended testis	2	—	2
Orchidectomy	2	—	2
Circumcision	—	83	83
Prostatectomy	22	—	22
<i>On Urinary Tract—</i>			
Cystoscopy	—	140	140
Cystoscopy with pyelography	—	37	37
Pyelo-lithotomy	4	—	4
Supra-pubic lithotomy	—	1	1
Supra-pubic cystotomy	10	11	21
Nephro-lithotomy	5	—	5
Nephrectomy	11	—	11
Partial cystectomy	1	—	1
For hydronephrosis—aberrant vessel	1	—	1
„ perinephric abscess	2	—	2
<i>Orthopaedic—</i>			
Amputation of lower limb	17	—	17
„ „ upper „	2	—	2
„ „ digits	—	5	5
Arthrotomy	6	—	6
Removal of cartilage	5	—	5
Tenotomy	—	1	1
Osteotomy	2	—	2
Tendon suture	—	4	4
Spine graft (Alber)	1	—	1
For osteomyelitis	22	—	22
Sequestrectomy	3	3	6
Reduction of dislocation	—	14	14
„ „ fracture	—	10	10
Open operation of fracture	14	7	21
Introduction of wires, &c.	—	6	6
Plasters	—	309	309
Arthrodesis	5	1	6
<i>On Nerves—</i>			
Periarterial sympathectomy	1	2	3
„ „ „	—	1	1
<i>Dental Cases—</i>			
Extractions	—	134	134
<i>Miscellaneous—</i>			
Incision of abscess	—	163	163
Suture of lacerations	—	44	44
Minor treatments	—	308	308
Burns—treatments	—	9	9
Blood transfusions	—	29	29
Totals	1,547	1,775	3,322

Analysis of Fractures and Dislocations treated to a conclusion during the year, their nature, together with the result of treatment.

Bone or Joint.	Result of Treatment.							
	Simple.				Compound.			
	Good.	Fair.	Poor.	Died.	Good.	Fair.	Poor.	Died.
Skull—vault	22	1	—	—	1	—	—	—
„ base	—	—	1	—	—	—	—	2
„ bones of face	4	—	—	1	—	—	—	—
Vertebrae	5	—	—	—	—	—	—	—
Ribs	8	—	—	1	—	—	—	—
Clavicle	7	—	—	—	—	—	—	—
Humerus	12	—	1	2	—	—	—	—
Radius, ulna or both	20	—	—	—	—	—	—	1
Pelvis	2	—	—	1	—	—	—	1
Femur, neck or great trochanter	11	1	2	17	—	—	—	1
„ shaft or lower end	8	—	—	—	—	—	—	—
Patella	5	—	—	—	—	—	—	—
Tibia	4	—	—	—	—	—	—	—
Fibula	5	1	—	2	1	—	—	—
Tibia and fibula	11	—	—	2	3	—	—	2
Tarsus, metatarsus or phalanges	5	—	1	—	2	—	—	—
Fracture dislocations—various	3	—	—	1	—	—	—	—
Injury to soft parts	174	1	2	2	—	—	—	4
Multiple bony injuries	—	—	—	1	—	—	—	1
Dislocations—various	21	1	—	—	—	—	—	—
Carpus, metacarpus or phalanges.. .. .	2	—	—	—	1	—	—	—
Separated epiphyses	4	—	—	—	—	—	—	—
Totals	333	5	7	30	8	—	—	12
Total .. 395								

Anæsthetics.

ANALYSIS OF ANÆSTHETICS ADMINISTERED DURING THE YEAR.

	Theatre.	Casualty Department.	Maternity Department.	Dental Department.
1. General—				
(a) Inhalation—				
Ethyl chloride	57	14	—	—
Ether	273	5	46	—
Chloroform	2	—	14	—
„ and ether mixture	67	—	13	—
Nitrous oxide and air	—	17	—	102
„ „ and oxygen	288	—	21	—
„ „ oxygen and ether	1,151	—	144	—
„ „ oxygen and chloroform	15	—	—	—
(b) Intravenous—				
Evipan sodium or pentothal sodium	274	4	1	—
Totals	2,127	40	239	102
2. Local—				
Cocaine, novocain, &c.	142	32	475	208
Ethyl chloride spray	—	3	—	28
Totals	142	35	475	236
3. Spinal—				
(Supplemented in come cases by in- halation anæsthesia) Total	82	—	—	—
GRAND TOTALS	2,351	75	714	338

Electrical Department.

Number of new patients	..	..	..	..	..	877
„ out-patients	..	..	..	..	..	20
„ patients transferred to the out-patient department	..	..	..	..	..	172

Analysis of Treatment.

Diathermy	..	..	..	3,843	Radiant heat	..	1,696
Galvanism	..	..	..	8,212	Ultra-violet light	..	4,326
Faradism	..	..	..	421	Examinations	..	2,657
Sinusoidal	..	..	..	1,323	Dressings	..	1,214
Ultra short wave	..	..	..	186			

Total .. 23,878.

Out-patients—treatments	..	..	..	..	..	15,486
In-patients—treatments	..	..	..	..	..	8,162
Percy House—treatments	..	..	..	..	..	230

TOTAL NUMBER OF TREATMENTS .. 23,878.

X-Ray Department.

<i>Number of patients—</i>							
In-patients	..	..	..	..	..	..	4,655
Out-patients	..	..	..	..	..	..	2,242
Total	..	..	..	..	..	..	6,897

<i>Number of radiograms—</i>							
In-patients	..	..	..	..	..	..	10,918
Out-patients	..	..	..	..	..	..	3,030
Total	..	..	..	..	..	..	13,948

<i>Number of treatments—</i>							
In-patients	..	..	..	..	..	..	74
Out-patients	..	..	..	..	..	..	171
Total	..	..	..	..	..	..	245

Analysis of investigations made during the year.

Investigation.	Appearances.		
	Normal.	Abnormal.	Total.
Skull and contents	208	96	304
Lungs and mediastinum	743	1,847	2,590
Pleura and pleural conditions	12	181	193
Heart and aorta	6	66	72
Lipiodol injections	7	84	91
Barium meal	143	283	426
Barium enema	44	76	120
Biliary tract—			
(a) with shadocol	25	40	65
(b) without shadocol	28	26	54
Urinary system	140	99	239
Pyelograms	65	70	135
Bones and joints—			
(a) for disease	180	467	647
(b) „ deformity	519	1,086	1,605
Generative system	120	140	260
Foreign bodies	10	52	62
Teeth	28	41	69
Totals	2,278	4,654	6,932

Massage Department.

PATIENTS.								Medical.	Surgical.	Total.
In-patients	..	..	..	..	..	..	..	332	2,161	2,493
Out-patients	..	..	..	..	..	..	..	292	421	713
Totals								624	2,582	3,206

TREATMENTS.								Medical.	Surgical.	Total.
In-patients	..	..	..	..	..	..	..	13,188	17,592	30,780
Out-patients	..	..	..	..	..	..	..	3,517	2,177	5,694
Totals								16,705	19,769	36,474

Ophthalmic Department.

In-patients treated	..	..	..	..	..	..	..	213
Out-patients ..	..	..	..	..	..	..	..	476
Total								689

Attendances—								
In-patients ..	..	..	..	..	..	..	..	587
Out-patients	..	..	..	..	..	..	..	592
Total								1,179

Patients provided with glasses	..	..	..	..	..	..	262
Ophthalmic operations	..	..	..	..	..	..	32

Acute Mental Cases.

				Males.	Females.	Total.
Remaining in 31st December, 1936	..	..	..	—	4	4
Admitted during 1937	..	..	..	151	237	388
Discharged during 1937	..	..	..	63	82	145
Transferred to mental hospital—						
(i) certified cases	..	..	..	74	143	217
(ii) temporary cases	..	..	..	—	3	3
(iii) voluntary cases	..	..	..	9	7	16
Died .. ..	..	..	..	2	5	7
Remaining in 31st December, 1937	..	..	..	3	1	4

Psychiatric Clinic.

In-patients ..	..	..	..	..	..	..	81
Out-patients	..	..	..	..	..	..	246
Total							327

Admitted to Springfield Mental Hospital as voluntary patients	..	49
Total number of attendances .. ..	..	515

Dental Department.

Patients seen	..	..	..	..	..	..	..	447
Attendances	..	..	..	..	..	..	..	1,060
Patients supplied with artificial dentures	..	..	..	..	..	..	..	184
Patients who had teeth extracted	..	..	..	..	..	..	..	236
Patients who had fillings	..	..	..	..	..	..	..	35

Queen Mary Maternity Wing.**ANTE-NATAL CLINIC.**

Number of sessions	..	..	..	..	..	..	..	469
„ „ new cases	..	..	..	..	..	..	..	2,200
„ „ attendances	..	..	..	..	..	..	..	13,015
Average attendances per session	..	..	..	..	..	..	..	28.2
Average attendances per patient	..	..	..	..	..	..	..	5.9

A decrease in attendances per patient since last year occurred because all new cases were referred to their local clinics until the pregnancy reached 36 weeks, except for a few abnormal ones which were retained.

Cases admitted for ante-natal treatment :—

From clinic	..	..	..	..	..	..	..	275
Emergency	..	..	..	..	..	..	..	67
Total								342

POST-NATAL CLINIC.

Sessions	..	..	..	..	..	..	..	49
Attendances	..	..	..	..	..	..	..	982
Number of cases	..	..	..	..	..	..	..	818
Average attendances per session	..	..	..	..	..	..	..	20.4
Percentage of discharged patients attending	..	..	..	..	..	..	..	44.6

LABOUR WARDS.**Admissions—**

Booked cases	..	..	..	..	..	..	..	1,925
Emergency admissions	..	..	..	..	..	..	..	188
Total..								2,113

Discharges—

Booked cases	..	..	..	..	..	..	..	1,928
Emergency admissions	..	..	..	..	..	..	..	188
Total..								2,116

	Booked Cases.	Emergency.	Total.
Delivered	1,710	122	1,832
Discharged undelivered	192	43	235
Born before admission	23	22	45
Died undelivered	—	1	1
Total	1,925	188	2,113

Average duration of stay in hospital, 14 days.

OBSTETRIC OPERATIONS.

	Booked Cases.	Emergency.	Total.
Forceps	135	15	150
Embryotomy and craniotomy	2	3	5
Manual removal of placenta	4	2	6
External version	50	—	50
Internal and bipolar version	3	6	9
Cæsarean section	19	5	24
Sterilization	2	1	3
Repair of perineum—1st and 2nd degree ..	472	16	488
" " " 3rd degree	12	2	14
Medical intensification	15	4	19
Surgical induction	8	10	18
Perineotomy (excluding forceps delivery) ..	46	2	48
Rotation of head	15	1	16
Others	11	8	19

GENERAL ANÆSTHESIA.

Gas and oxygen ..	..	..	..	..	..	..	..	21
Gas, oxygen and ether ..	..	..	..	..	..	..	..	144
Ether ..	..	..	..	..	..	..	..	46
Chloroform ..	..	..	..	..	..	..	..	14
Chloroform and ether ..	..	..	..	..	..	..	..	13
Evipan .. ..	..	..	..	..	..	..	..	1
				Total	..	..	..	239

PUERPERAL MORBIDITY.

Analysis and cause of morbidity.	Booked Cases.	Emergency.	Total.
Infection of birth canal	13	3	16
Mastitis	5	—	5
Infection of upper respiratory tract ..	1	—	1
„ „ lower „ „ ..	5	—	5
Urinary infection	7	1	8
Influenza	3	—	3
Undetermined	18	4	22
Totals ..	52	8	60

MATERNAL MORTALITY RATES.

Booked cases	..	..	..	3 deaths.	1·77 per 1,000 live births.
Emergency cases		..	..	4 deaths.	20·4 per 1,000 live births.
Total	..	..	..	7 deaths.	3·9 per 1,000 live births.

NOTES ON MATERNAL DEATHS.

1. *Ante-natal Clinic Case.* Wassermann Reaction ++; Treated during pregnancy for syphilis. Normal labour; developed influenzal broncho-pneumonia on 10th day of puerperium and died 14 hours later.

2. *Emergency Admission*.—Admitted after “failed forceps”; infected ++; twins; prolapse of cord; 1st infant macerated; 2nd infant forceps, manual removal of placenta; died 5 hours later; toxæmia of pregnancy.

3. *Emergency Admission*.—Born before admission; placenta still *in situ*; shock; blood transfusion; shock progressively deeper; manual removal of placenta; died.

4. *Ante-natal Clinic Case*.—Normal pregnancy and labour; puerperal septicaemia; died 8 weeks after delivery.

5. *Emergency Admission*.—Admitted with hyperpiesis; no albuminuria; no œdema; died suddenly after one fit, 7 days after admission; post-mortem—cortical necrosis of kidneys.

6. *Ante-natal Clinic Case*.—Hydrocephalus; collapsed under anæsthetic whilst foetal head was being perforated.

7. *Emergency Admission*.—Admitted in second stage of labour; transverse lie; delivered and died 4 hours later; post-mortem—collapse of lung.

INFANTS.

Number of infants born	..	..	..	..	..	..	1,862
<i>Presentation—</i>							
Vertex, anterior	..	..	..	..	..	..	1,766
„ persistent ocipito-posterior	..	..	..	..	..	..	15
Primary breech, uncomplicated	..	..	..	..	..	..	23
„ „ complicated	..	..	..	..	..	..	38
Transverse	..	..	..	..	..	..	6
Face and brow	..	..	..	..	..	..	7
Complex	..	..	..	..	..	..	2
Cord	..	..	..	..	..	..	5
Total							1,862

INFANT MORTALITY.

	Booked.	Emergency.	Total.
Stillbirths, non-macerated	20	17	37
„ macerated	19	13	32
Neonatal deaths	21	10	31
Total	60	40	100

Analysis of Stillbirths.

<i>Macerated.</i>				<i>Non-macerated.</i>			
Maternal toxæmia	...	...	1	Maternal toxæmia	...	...	2
Congenital abnormality	...	...	1	Congenital abnormality	...	...	7
Accidental ante-partum hæmorrhage	...	...	5	Accidental ante-partum hæmorrhage	...	...	3
Prolapse of cord	...	...	2	Prolapse of cord	...	...	3
Placental insufficiency	...	...	2	Placenta prævia	...	...	6
Others	...	...	21	Difficult labour	...	...	5
			—	Prematurity only	...	...	5
			32	Others	...	...	6
			—				—
							37
							—
Total				69.			

Analysis of Neonatal Deaths.

	Booked.	Emergency.	Total.
Prematurity	7	6	13
Congenital abnormality	6	1	7
Birth injury (intracranial hæmorrhage)	2	—	2
Hæmorrhagic disease of newborn	2	—	2
Acquired diseases	1	1	2
Others	3	2	5
Totals	21	10	31

PREMATURE INFANTS.

Under 5 lbs.	Booked Cases.	Emergency Cases.	Total.
Born alive	43	16	59
Died	7	6	13
Discharged over birth weight	34	8	42
„ under	2	2	4
Stillbirths—fresh	4	7	11
„ —macerated	5	8	13

INFECTIOUS DISEASES.

Ophthalmia neonatorum	..	..	..	..	..	..	4
Pemphigus	..	..	..	..	..	..	1
Infants not entirely breast fed	..	..	..	..	..	..	77

Pathological Department,
ANALYSIS OF INVESTIGATIONS.

Bacteriology.

Swabs from ear, nose and throat for Klebs-Löffler bacillus, &c.	..	..	..	..	..	..	481
„ for gonococci, &c.	..	..	..	..	..	..	213
Sputa for bacillus tuberculosis	..	..	..	..	..	..	701
Urine	..	..	..	..	..	..	2,420
Fæces	..	..	..	..	..	..	215
Pus	..	..	..	..	..	..	407
Cerebro-spinal fluid	..	..	..	..	..	..	292
Other fluids	..	..	..	..	..	..	173
Blood cultures	..	..	..	..	..	..	106
Miscellaneous—teeth, hairs, &c.	..	..	..	..	..	..	96

Hæmatology.

Hæmoglobin—estimation with total and differential counts	..	..	..	..	..	..	818
„ and total counts only	..	..	..	..	..	..	521
Leucocyte counts only	..	..	..	..	..	..	358
Miscellaneous—grouping, &c.	..	..	..	..	..	..	215

Bio-Chemistry.

Blood, urea estimation	..	..	..	..	..	..	385
„ sugar estimation	..	..	..	..	..	..	358
„ Van-den-Bergh reaction	12
„ and urine—urea concentration factor	14
Urine, urea estimation	75
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Serology.

Blood, Wassermann reaction	2,767
Cerebro-spinal fluid, Wassermann reaction and Lange's test	102
Blood, complement fixation test	..	..	..	..	..	..	15
„ Widal reaction	..	..	..	..	..	..	50

Histology.

Tissues for section	..	..	..	..	..	..	771
Animal Experiments, Total	..	..	..	..	..	..	178
Total	..	..	..	..	..	..	11,866

Almoner's Department.

Although the establishment of an almoner's department is a comparatively recent development in this hospital, the work done by the almoner and her staff has already proved to be of the greatest assistance both to the medical officers and to the patients. It is difficult to express social service by means of a numerical table, but the following figures give some indication of the volume of work undertaken in this department.

INTERVIEWS.

In-patients	..	..	..	..	..	..	7,257
Ante-natal cases	..	..	..	..	..	..	2,200
Out-patients	..	..	..	..	..	..	7,704
Total	..	..	..	..	..	..	17,161
Admissions to hospital arranged by almoner	6,451
Ambulance journeys arranged by almoner	5,048

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Administrative County of Middlesex

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